

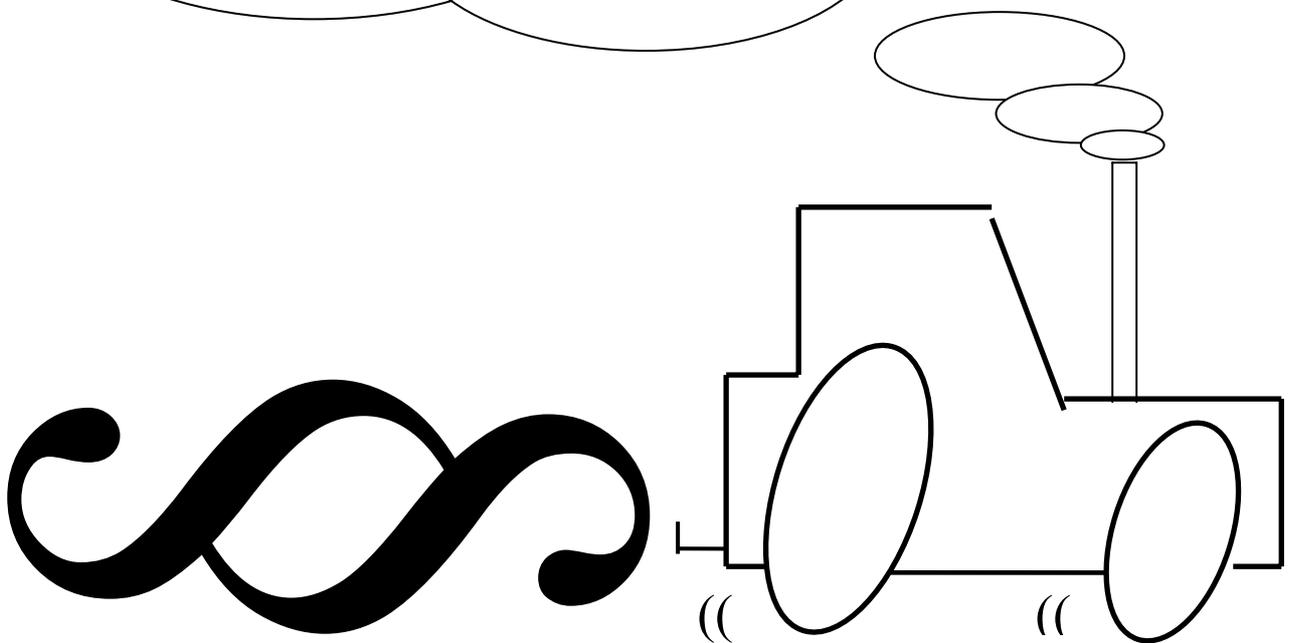
Compliance costs of value-added tax in Sweden

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Report 2006:3B

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English translation by Tolkcentralen I Göteborg, John Hughes

Foreword

The conditions under which businesses operate are determined not only by the game rules of the market economy but also by the regulatory frameworks and administrative requirements that surround the business sector in a number of aspects. Regulations are often necessary if the various needs of society are to be met. It is, however, important not to forget that these regulations at the same time rob business enterprises of time and resources.

The National Tax Board is working towards the goal that the payment of our taxes shall be done in the most simple and efficient way possible. We wish therefore to strive to achieve simple and modern rules. One way of observing how we live up to this goal is to measure the taxpayers' costs of compliance, i.e. the resources in the form of time and money that taxpayers put into fulfilling their obligations under our tax laws. We may say that the higher the costs of compliance, the less efficient is the system of taxation and tax administration. High compliance costs can also contribute to undermine the vision held by the National Tax Board—the desire that everyone should do their bit.

In the present study the Tax Board has measured and analysed the cost to business enterprises of compliance with the rules for value-added tax. The intention is that the results and the analyses of these costs should be a starting point for discussing the burden that is placed on businesses and in what way this burden may be made lighter.

Mats Andersson and Anna Hansson of the analysis section of the production department were responsible for compiling this report. Katrin Wallberg of the analysis section took part in the work of preparatory mapping. The statistical part of the study, the postal survey and telephone interviews were carried out between September and October 2005 by Kinnmark Information AB and TNS Gallup AB.

Solna, February 2006

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Summary

Living up to the demands of the tax laws entails costs in time and money. These costs are called compliance costs. This report presents the results of a survey of the costs to business enterprises of compliance with the rules for value-added tax (VAT) carried out in the autumn of 2005. The information provided by the businesses themselves is the basis of the computations contained in this report.

Total compliance costs

Total compliance costs for VAT amount to SEK 6.3 thousand million. Businesses with between 0 and 4 employees carry 73 per cent of total compliance costs which corresponds to approximately SEK 4.5 thousand million. Compliance costs for businesses with more than 500 employees amount to about SEK 270 million, or about 4 per cent of total compliance costs.

Compliance costs for VAT correspond to about 3 per cent of total VAT revenues to the state. In 1993 a similar survey was carried out and it was ascertained then that compliance costs corresponded to 2.5 per cent of VAT revenues. Measured in this way compliance costs have thus increased by 0.5 percentage units or by 20 per cent.

Comparison with the 1993 survey

Total compliance costs for VAT expressed in Swedish Crowns (SEK) has in real terms increased by SEK 1.9 thousand million, or 40 per cent, since 1993. SEK 1.1 thousand million of this sum can be explained by a change of volume, i.e. there are more businesses in 2005 than there were in 1993. The remaining SEK 0.8 thousand million are explained by increased costs to businesses. In real terms compliance costs have thus increased by 17 per cent due to more complicated rules for VAT. The entire cost increase has affected only the smallest businesses. In businesses with between 0 and 4 employees costs have increased by SEK 1.6 thousand million. However for all other businesses costs have gone down.

Reasons for the change

The report makes a close study of three of the most important factors behind the change in compliance costs that has occurred since 1993. These are the change in the regulatory framework, the development of computer technology and the change in the structure of commerce and industry. The first two factors are significant for individual businesses and explain a large part of the aforementioned change in costs. The last factor has no significance from a business perspective but is relevant for total compliance costs and accordingly for the volume change.

The change in costs - significance of the regulatory framework and computer aids

The regulatory framework has become much more complicated since the previous survey in 1993. The most important changes are that the tax rate structure has changed, the taxable periods have increased in number and become shorter and that Sweden has introduced a number of EU-related regulations. The development of the computer systems that are available as aids to handling VAT, i.e. accounting programs complete with hardware has been such that handling VAT has in fact not become very much more difficult for the individual

user. This is despite the fact that the regulatory framework has become considerably more complex. According to the computer software companies the increased complexity of the regulatory framework has to a high degree been met by improved computer programs. At the same time the development of prices for hard- and software combined with increased computers skill has meant that it has become cost effective for increasingly smaller businesses to handle VAT using technical aids. There is however always a limit to the size of a business beyond which it is no longer profitable to buy computers complete with programs or beyond which time and knowledge are not sufficient for learning new techniques. For such businesses the increased complexity has resulted in a higher degree of more onerous work in handling VAT.

This reasoning can be summarised as follows:

- The regulatory framework has become more complex over the last 15 years
 - Computer techniques have to a high degree compensated for this increased complexity and have in relative terms become cheaper
 - The threshold for the size of a business for profitable use of new techniques for handling VAT is lower
- ⇒ Compliance costs have increased for the smallest businesses whereas they have decreased for large businesses.

The change in volume – the change in the structure of commerce and industry

Since 1993 the number of businesses registered for VAT has increased by about 150,000. A natural consequence of this is that compliance costs too have increased. However this report takes a step forward in investigating how the structure of commerce and industry has influenced compliance costs.

The structure of commerce and industry has changed historically in such a way that in step with the essential production of food and other basic goods being able to be carried out more efficiently resources have been liberated for less vital goods and services. At the end of the eighteenth century a majority of the population of Sweden was employed in the agricultural sector. As agriculture became more efficient resources were freed for use in industry. During the last decades industrial production has in turn become more efficient and this has freed resources for the production of services. Parallel to this development there is a trend in industry towards concentration purely on the production of goods. The production of services that previously took place within industrial firms tends more and more to be performed by external and independent businesses that sell their services on the open market. Production that previously took place within a small number of large firms is now carried out in many small ones. As small businesses have relatively higher compliance costs than large ones the significance of this trend is that the pace of development of compliance costs will increase over time.

This reasoning may be summarised as follows:

- The development of the structure of commerce and industry is towards an increasing number of small businesses
 - Compliance costs are, viewed relatively, highest among small businesses
- ⇒ The increase in volume of compliance costs is amplified by structural change

Provided that the change in the structure of commerce and industry is economically rational the results of the foregoing mean that the VAT system is to some extent a brake on the development of the economy. This merits closer discussion both from the perspective of business and from the economy as a whole. To be able to fulfil its mandate the Tax Board is dependent upon the taxation system being accepted by tax-payers. If the system is perceived as being unnecessarily onerous the task of the Tax Board will be made more difficult. For the benefit of Sweden's economy it is important that the economic obstacles are as few as possible. Unnecessarily high compliance costs do not constitute efficient use of resources and should therefore be reduced as much as possible. From these results it may be concluded that the VAT system should be adapted as much as possible to the development of the economy. Primarily it should be a matter of making it easier to file VAT returns for first of all small companies.

Compliance costs among different categories of taxpayers

Besides the aforementioned comparison of the changes in compliance costs in a wide perspective this study includes a number of analyses of the influence of various factors on compliance costs.

Size of business

The single most important explanation of the magnitude of compliance costs is the size of the business. This study confirms also what many previous studies have shown and that is that compliance costs are strongly regressive meaning that they punish smaller businesses more than large ones. A business with between 1 and 4 employees has, for example, fully 35 times higher compliance costs per employee than a business with between 50 and 499 employees.

Differentiated rates of VAT

The survey shows that there is a distinct correlation between the costs of handling VAT in businesses and the number of rates of VAT they handle. The correlation does not change even if we keep other factors constant, such as turnover, number of years of active business, use of a computerised accounting system and if the business does the accounting of VAT and filing of VAT returns internally or with external assistance. The cost per business increases both between one and two and between two and at least three rates of VAT. The difference, for example, between those businesses that have to deal with one rate of VAT and those with at least three rates of VAT is fully SEK 8,000 per business.

By comparing the average cost per business with varying numbers of VAT rates we have been able to estimate the additional cost of handling multiple VAT rates for the businesses taking part in the survey at about SEK 500 million. This additional cost is equivalent to 9 per cent of the total compliance costs and 30 per cent of the compliance costs of businesses with more than one VAT rate.

Differences in different business sectors

This study confirms that compliance costs differ between different business sectors. The lowest compliance costs are in the groups real estate administration and business services as well as agriculture and forestry. Low costs also exist in the group public administration, education, health services and other personal services. The last sector is however very

heterogeneous and for this reason difficult to comment upon. The highest compliance costs are in the business sectors trade and communications, industry and the construction industry.

It may be observed that all of the three groups of business sectors with the highest costs have to handle complicated rules for VAT. The industrial sector is often faced with transactions that involve other countries, both within and outside the EU. The building industry has special rules for payment on account and for the final settlement of construction projects. The business sectors trade and communications are often required to handle several tax rates which entails, among other things, a more complex accounting system and problems connected with demarcations.

Internal or external assistance

According to the survey 50 per cent of all businesses handle VAT entirely internally whereas 45 per cent of businesses rely on external assistance. Large businesses handle VAT to a greater extent internally than others. Compared with the survey of 1993 the number of businesses relying on external assistance has increased whereas the number of businesses that handle VAT wholly internally has fallen.

VAT and the liquidity of businesses

The study also examines how the VAT system influences businesses from the aspect of liquidity.

Compensation in the form of credit

Provided that businesses get paid by their customers before they themselves have to pay in VAT and that the net amount of VAT is positive, i.e. that the payable (output) VAT is greater than the deductible (input) VAT, then businesses get a tax credit. The value of this credit is the interest they would have had to pay if they had instead borrowed the same amount. This interest could be viewed as compensation for the businesses acting as tax collectors on behalf of the government.

A somewhat simplified estimate of the size of this interest compensation shows that the interest for most of the smallest businesses only covers a very small part of the compliance costs, whereas it can be considerable for many of the largest ones. For the largest businesses of all it can sometimes even be higher than the costs. In other words interest compensation amplifies the regressiveness described above.

The VAT system and credit given by businesses to customers

The VAT system is intended to be adapted to the terms of payment normally current in business. In recent years there have been reports, however, that more and more businesses are faced with a situation where they must pay VAT before they themselves receive payment from their customers. This can of course happen to any business on isolated occasions, for example, if a customer has liquidity problems and for that reason has no possibility of paying his invoices. The question is nevertheless whether there are businesses confronted by a situation where they need to have VAT money owing to them because important or powerful customers demand extended credit. In this survey a representative sample of businesses were asked, among other things, if it had ever happened that they had had to pay VAT before they themselves had received payment from their customer. The answers show that 40 per cent of all businesses at some time have had to pay VAT before being paid themselves by their customer. For 8 per cent of businesses it is a matter of a significant portion of their turnover at the same time as the cause of this is that the customer is wholly or partly exploiting a position of power.

Conclusions

This study shows that the costs to businesses of compliance with the rules of VAT have increased by approximately SEK 1.9 thousand million since 1993 and amount today to almost SEK 6.3 thousand million. That part of the increase in costs that is not explained by the fact that the number of businesses has increased has without exception affected only small companies.

The increase in compliance costs depends, among other things, on the fact that the regulatory framework has become more complicated during recent years. To meet the increased complexity the suppliers on the market for computer aids, as well as businesses themselves have improved routines and programs. This has also had the result that compliance costs for middle-sized and large businesses have in most cases fallen. Small businesses often lack the necessary resources for investing in improved routines and programs and this partly explains why their costs have increased instead.

For society as a whole these compliance costs are nothing more than deadweight costs to run the VAT system. They represent resources that could be used in an economically more rational way. High compliance costs can also contribute to businesses questioning their faith in the taxation system which makes it more difficult for the Tax Board to fulfil its mandate.

Measures to reduce compliance costs must be a combination of tax policy (rule simplification) and tax administrative measures. The intention of this report is not to recommend concrete measures but rather to point to areas where changes are possible.

Changes of rules may be divided into two categories. The first consists of pure simplifications of the regulatory framework that mean that the actual handling of VAT is made simpler for businesses. The other is curtailments of the area that is covered by the regulatory framework, e.g. the number of businesses liable for tax.

A uniform rate of VAT would entail a reduction of compliance costs by approximately SEK 500 million. A turnover threshold of SEK 90,000 would reduce the number of businesses

liable for VAT and thereby compliance costs by an estimated amount of SEK 280 million. These two measures together would reduce total compliance costs by about 12 per cent. The government's goal is to reduce compliance costs in businesses by 20 per cent by the end of 2010. By means of these fairly far-reaching changes this objective would be reached by half. Upon reflection the goal appears to be very ambitious. In order to reach it we may well ask if even more radical measures are necessary.

1 Introduction

The mandate of the Swedish National Tax Board is to collect the taxes that have been determined in accordance with accepted democratic procedures. If this mandate is to be fulfilled in a reasonable manner it is necessary that the system of taxation is generally accepted by tax payers. An important and necessary condition for the tax payers' acceptance is that tax rules are easy to understand and apply. Taxes must, among other things, be reported and paid in the simplest manner possible. A way of measuring the ease of application of a tax is to estimate how much it costs the tax payer in time and money to comply with the laws and rules associated with the tax. This cost is called compliance cost and is the subject of this report. To put it more specifically, the report deals with the costs incurred by business enterprises in fulfilling their obligations under the Value-Added Tax Act.

Value added tax, or VAT, is an indirect tax. This means briefly, somewhat simplified, that the full burden of the tax is carried by the final consumer but is charged, reported and paid to the tax authority by the producer or the seller. Expressed in another way the tax object and the tax subject are not one and the same person.¹ As businesses administer a tax which they themselves do not have to pay they function as tax collectors for the government, which does not reduce the importance of making it as easy as possible to handle this tax.

Besides the government's ambitions to reduce generally the administrative burden on businesses, the Tax Board is striving to simplify tax rules and administrative routines. To assess the trend from the tax payer's perspective the Tax Board has chosen to keep track of the real compliance costs in businesses of VAT. The first survey to measure these costs was carried out in 1993, as part of the evaluation of the tax reform.² In the autumn of 2005 a comparable survey was carried out and its results are given in the present report.

The goal of the survey is to assess the total cost to businesses of compliance with the demands of the VAT Act, to assess the change in this cost since the time of the previous survey and to find areas that are especially onerous for businesses. The aim is to acquire a starting point for discussing the size of the burden that is placed on businesses and whether, and in that case how, the burden can be made lighter.

Nutek (the Swedish National Board for Industrial and Technical Development) was commissioned by the government to measure business costs associated with keeping VAT accounts and filing VAT returns in 2004. The question is then why the Tax Board has chosen to carry out another survey? This question has many answers. The most important reason is that the Tax Board wished to produce material that is comparable with the survey done in 1993. In addition it may be said that the two surveys supplement each other. The methods and

¹ In theory VAT is passed on from the producer and the seller to consumer. In reality producers and sellers may have to carry VAT to a varying extent. How large a portion is passed on depends on the price sensitivity of different markets.

² Malmer, Håkan, Persson, Annika & Tengblad, Åke: *The Tax reform of the century. Effects on the tax system's operating costs, tax planning and tax cheating. Follow-up of the tax reform 1990-1991*. 1994. (Århundradets skattereform. Effekter på skattesystemets driftskostnader, skatteplanering och skattefusk. Uppföljning av skattereformen 1990-91, 1994.)

perspectives in the respective studies differ however in several essential respects. These differences may be briefly summarised by saying that the Tax Board's survey adopts a macro-perspective, attempting to give a total picture of which economic resources are used for handling VAT, whereas Nutek's survey has a narrower micro-perspective that shows the costs to businesses entailed by individual legal rules.

The report is structured as follows. The first section contains a general exposition of the theory of the concept of compliance costs and a review of earlier studies in this field. After that the results of the present study are presented at a total level. In the next section an account is given of the comparison with the 1993 study. The subsequent sections give an account of how compliance costs differ between various categories of business. In the last section of the main report an account is given of how the VAT system affects the liquidity of different businesses. Annexe 1 and 2 contain a more detailed comparison of the Tax Board's and Nutek's respective surveys.

2 Theoretical background

Compliance costs have received ever increasing attention during the last decades among civil services, tax administrators and in the academic world as well. This indicates that compliance costs have been the subject of an extensive body of theory. The present section gives an overview of the theoretical background to the measurement of compliance costs.

All tax systems give rise to costs beyond the tax paid by individuals and businesses. Economic theory mainly speaks of the distorting effects and efficiency losses caused by taxes in the form of disturbances to the price mechanisms of markets. But the tax system also gives rise to administrative costs, i.e. the Tax Board's costs for the administration of the tax system and compliance costs consisting in the costs incurred by individuals and businesses in keeping records and accounts for tax and in paying it. Taken together, compliance costs and administrative costs constitute the operating costs of the tax system.

Cedric Sanford gives us what is perhaps the most frequent description of compliance costs in his definition of compliance costs as the costs that arise when tax payers fulfil their obligations under current tax law and administrative routines related to taxes. It is a matter of costs additional to the specified tax and additional to the costs that arise due to the distorting effects of the tax.³

For the tax payer compliance costs consist in costs for finding out which rules apply, the time it takes to fill in the forms of tax returns that are to be filed and to acquire, organise and save the information necessary for filling in the tax returns, possible remuneration to a tax consultant, unforeseen expenditure, e.g. travelling costs of visiting a tax lawyer or a tax authority and, what is more difficult to assess, psychological costs that may affect certain tax payers as a result of anxiety and stress associated with filing a tax return. Beyond this, compliance costs can arise in connection with inquiries and inspections conducted by the Tax Board.

The different aspects of compliance costs are usually classified in slightly different ways. A short account is given below of the most frequent categories.

Regular and temporary compliance costs

Regular costs are costs resulting from an unchanged tax system, whereas temporary costs arise in the event of changes in the tax system. Temporary costs also occur for newly started businesses and for businesses that are changing course. A further cost that may be characterised as a temporary cost are costs associated with audits and other tax inquiries.

³ Sanford, C.T., M.R. Godwin P.J.Hardwick, *Administrative and Compliance Costs of Taxation*, Fiscal Publications, Bath, 1989.

Voluntary and compulsory costs

Compulsory costs are costs that can not be avoided if the legal requirements are to be fulfilled. Voluntary costs are costs beyond this, for example, costs for tax planning. An example is costs associated with voluntary liability for tax for business premises which in theory are optional. In practice it is perhaps a market requirement to be liable for tax. A more detailed discussion of voluntary and compulsory costs follows in section 2.2 under the heading Tax Planning and Evasion of Tax.

Internal and external costs

Internal costs are costs for the work employees devote to tax questions, e.g. doing the book-keeping, filling in tax returns and handling contacts with tax authorities etc. External costs are costs for external advisers such as accountants, lawyers and other tax advisers.

Calculation and planning costs

Calculation costs or 'pure' compliance costs are associated with routine day-to-day tasks that are unavoidable. Planning costs or guidance costs as they are also sometimes called refer to objections, inquiries and appeals in respect of various tax issues.

2.2 What costs should be categorised as compliance costs?

Bookkeeping costs

Even if it is relatively easy to define compliance costs in theory there are several areas in which it can be difficult in practice to decide whether a cost is to be classed as a compliance cost or not. Such an area is the demarcation between compliance costs and the business's bookkeeping costs. Sanford illustrates this problem by describing a situation without any taxes where a firm A has great need of detailed bookkeeping whereas another firm B has in principle no bookkeeping at all. If in this situation VAT on goods and services is introduced the compliance costs of firm A will not increase to any appreciable extent. Compliance costs for firm B on the other hand will show a marked increase because this firm would among other things need to introduce a completely new bookkeeping system to satisfy the tax authorities.⁴ This example is extreme, but there are many intermediate situations. Many small businesses would have been satisfied with less sophisticated bookkeeping if it had not been for the tax laws and for this reason a large part of their bookkeeping costs should be classed as compliance costs. For most large businesses the situation is the reverse. Because compliance costs can differ so much between different businesses it must finally be up to the individual business owner to decide which costs are to be viewed as compliance costs.

A requirement in tax law may also often be a requirement under some other legislation, e.g. the Bookkeeping Act. The question is then whether the compliance cost is a consequence of tax law or of the other legislation. This is a very theoretical question in fact as the cost to the business will exist irrespective of which legislation it is referred to. In the case where compliance costs resulting from both legislations are measured simultaneously one should

⁴ Sanford (ED) *Tax Compliance Costs Measurement and Policy*, Fiscal Publications, Bath, 1995

bear in mind not to include the cost more than once. In addition one should of course be aware that the cost does not vanish as a result of the tax law alone being changed.

One tax and several taxes

It can be difficult to measure compliance costs for one tax in a business that pays several taxes. Even if all the taxes individually require a considerable level of bookkeeping, the total compliance cost need not necessarily decrease because one individual tax disappears. Most bookkeeping routines will still be needed in order to pay the remaining taxes. The extra compliance cost caused by an individual tax is thus easily underestimated.

Indirect costs

Another problem is the treatment of indirect costs. Indirect costs that may be referred to handling tax matters should theoretically be included among compliance costs. But in practice this can be difficult. In a large business with its own tax department it is fairly obvious that certain indirect costs such as costs of rent and heating are to be included in compliance costs whereas in a smaller business it may be more difficult to calculate these costs. In many studies of compliance costs it has been stated specifically which costs are being measured. Sanford notes however that compliance costs will be underestimated in cases where questions are asked about direct costs only⁵

Tax planning and tax evasion

A much debated question is whether costs of tax planning and tax evasion are to be classed as compliance costs. A distinction is often made in the discussions between voluntary and compulsory costs. According to this division compulsory costs are those costs that cannot be avoided if the requirements of the law are to be fulfilled, whereas voluntary costs are costs beyond this, e.g. costs of tax planning. Sanford (1995) is doubtful about this division and maintains that a tax system can offer many forms of tax relief in the form of deductions and tax subsidies that most normal tax payers can possibly avail themselves of. This gives rise to costs that should reasonably be included among compliance costs. On the other hand certain tax payers devote a lot of time to trying to evade existing tax laws in order to reduce tax intentionally by means of transactions that have no other relevance for their business. In such cases it more doubtful whether costs for these transactions are to be included among compliance costs. In a strict sense however these costs would not exist if the tax did not exist.

Psychological costs

There is no accepted definition of psychological costs but one usually speaks of the stress, anxiety and frustration that tax payers can experience in connection with compliance with complicated tax rules. Psychological costs are difficult to measure and there are few empirical studies in this field. In Sweden an attempt was made to estimate the psychological cost of the work of the individual person with his or her own tax return by asking the interviewee to put a price on the work of preparing the tax return on the supposition that they could get paid for it.⁶

⁵ Sanford (1995)

⁶ Malmer, Håkan, Persson, Annika & Tengblad, Åke: *The Tax reform of the century. Effects on the tax system's operating costs, tax planning and tax cheating. Follow-up of the tax reform 1990-1991.* 1994. (Århundradets skattereform. Effekter på skattesystemets driftskostnader, skatteplanering och skattefusk. Uppföljning av skattereformen 1990-91, 1994.

2.3 Can compliance be a positive thing?

Liability for tax is in certain cases considered to be able to entail recurrent benefits, particularly in businesses, in the form of a better basis for decision making. These benefits arise as a result of the business being compelled to have good order in its accounts in order to be able to fulfil its duty under the tax laws.

The possible benefits that compliance with the tax laws may entail are most often very difficult to quantify and are normally excluded from studies of compliance costs. The benefits that may arise appear different depending on the type of business. An Australian study shows for example that small businesses to a lesser extent than large ones see an added value in the need to supply of information required by the tax.⁷

In the same study the question was also asked how one should keep separate and evaluate a business's own needs of bookkeeping as opposed to the requirements of the tax laws in respect of supplying information. Should the fact that a business, irrespective of the demands of the tax laws, needs a certain amount of bookkeeping, or can gain advantages from the tax laws, be considered then to derive a benefit from this, i.e. something that can be 'offset' against the business's compliance costs? In the aforementioned study for example, both a gross cost and a net cost were worked out where the gross cost constituted the total costs (for society) while the net cost (for the business) was defined as the total compliance costs less possible benefits yielded by the tax system.

In this context it may also be mentioned that a study carried out in England shows that the tax system results in large flows of money both in the private sector and between the private and public sectors. Seen in total these payments flows in the form of credits were a not unsubstantial compensation for the total compliance costs. The positive effects were however very unevenly distributed between different businesses. When the value of the increased money flow was deducted from the compliance costs it emerged that on the whole many large businesses benefited from the system. For small businesses it was the reverse however; compliance costs were still high, and in some cases the money flow amplified the regressiveness in the system.⁸

The aforementioned study points however to the important difference between compliance costs and the benefits resulting from an increased money flow. The money flow redistributes money between consumers, businesses and the government whereas compliance costs are dead weight costs to operate the system. Identifying these money flows is important if we are to observe how the tax system's advantages and disadvantages affect different businesses, but they do not alter the total cost of maintaining the system.

The possible advantages that the tax system may bring to businesses can contribute otherwise to making them loyal to the tax system and to their accepting compliance costs. In the case of

⁷ Evans C., Ritchie K., Tran-Nam B. and Walpole M., *A Report into the Incremental Costs of Taxpayer Compliance*, Australian Government Publishing Service, Canberra 1996.

⁸ Sanford (Ed.): *Tax Compliance Costs Measurement and Policy*, 1995 (Chap. 4: *The Compliance Costs of the United Kingdom Tax System* by Michael Godwin.)

Sweden it may be mentioned that at the time of the introduction of VAT, the filing period was two months for businesses which gave them a certain credit and increased their cash flow.⁹ The purpose of the relatively long filing period was to compensate businesses for their work as VAT collectors. When the clearing account for taxes was introduced in 1996 the filing period was reduced from two to one month. At the same time the time limit for payment was brought forward considerably and the advantages of the VAT system were thereby reduced. (This subject is treated in more detail in chapter 8).

2.4 The interest in compliance costs has increased over the years

Even if compliance cost is a relatively new concept the ideas underlying the terminology are far from new. It is often pointed out that Adam Smith, the father of political economy, already focussed on the operating costs of the tax system. Of his four basic rules for a tax system: equality, predictability, simplicity and efficiency two, predictability and simplicity refer exclusively to compliance costs. Also the rule of efficiency of which the sense is that 'every tax should be constructed in such a way that it takes as little as possible out of the pockets of citizens beyond what it gives to the state in tax revenues' has to do with compliance costs, but it also has to do with administration costs.¹⁰

Despite the fact that the significance of compliance costs, at least in the academic world, has been known for a long time, most economists have chosen to focus on the first rule: equity. The main part of economic research has been preoccupied with trying to describe the distorting effects of taxes on the choices of businesses and of individuals.

The first attempt to measure compliance costs was made in 1935 by Haig. It was nevertheless not until the mid 1970s that the concept began to be used by a wider circle and more extensive studies of compliance costs began to be carried out. Since then interest, both among researchers and among politicians, has increased considerably. The results of the earlier studies awakened the interest of politicians and this in turn resulted in more research. Today compliance costs are a natural part of tax policy discussions and in many countries there exist clearly formulated objectives to reduce compliance costs by a given amount.

Thanks to the relatively extensive research carried out in recent years we now know that compliance costs use up extensive economic resources. For instance, all studies of this subject show that compliance costs are higher than the administrative costs of public authorities many times over. We also know that compliance costs are often arbitrary and have negative distributive effects, particularly on businesses.

All comparisons of compliance costs with regard to sizes of business show that compliance costs are regressive and hit small businesses relatively harder than large businesses and self-employed people harder than employees. High compliance costs often give rise to a negative attitude among tax payers which can be assumed to have a negative effect on their willingness to pay tax.

⁹ Before value-added tax was introduced, that is, at the time when we had a sales turnover tax businesses were remunerated for performing of tax-collection.

¹⁰ Smith, 1776, Book 5, Chapter 2, part 2 in Sanford (1995).

The circumstances described in the foregoing illustrate the importance of continuing studies and political measures with regard to compliance costs. In order to understand fully the great interest in compliance costs that has emerged over the last twenty to thirty years we must nevertheless look for further explanations. Sanford points to how computerisation has made it easier to carry out extensive statistical surveys and to analyse the results. In turn this has led to greater belief in these results and an increased interest from those in authority.

He also maintains that the introduction of value-added tax in several countries, among others, the UK, has resulted in an increased interest in compliance costs, both among business owners themselves and among those in power. VAT is a tax charged on transactions and of necessity carries high compliance costs. An introduction of VAT has many times been followed by vociferous campaigns led by small business organisations where many times the compliance costs of VAT have been exaggerated. This has in turn induced those in authority to initiate studies of the subject area themselves.¹¹

Another circumstance behind the increased interest in compliance costs is the new business culture that increased in influence during the 1980s. The belief mainly in the ability of small businesses and self-employed persons to create growth and jobs grew at the same time as compliance costs for these particular businesses turned out to be relatively high. In view of this development many countries have put resources into deregulations and remedial measures aimed at small businesses. At the same time as many governments are busy trying to reduce compliance costs it is a fact that the tax systems in many countries have become more complex and far-reaching in recent years. The number of rules has increased and they apply to more and more businesses. Since the 1960s GDP has increased in all OECD countries and in step with this the tax burden. This has probably increased compliance costs as tax bases have increased and new taxes have been introduced. Other causes of tax systems becoming more complex are various attempts to prevent the shirking and evasion of tax with more multifarious and complex rules as a result. Higher living standard has also increased compliance costs as many people have income from several sources today. Another important explanation of why the importance of compliance costs has increased is their connection with voluntary participation (see further under 2.5). In some cases attempts to reduce administration costs in order to reduce public expenditure have led to increased compliance costs instead. The increased interest in compliance costs was also manifest at the IFA congress (International Fiscal Association) in 1989 which was devoted to the subject of compliance costs. At the congress it was decided that the governments of the world should be urged to devote more attention to this issue.¹²

The increased awareness of the importance of compliance costs has in some countries led to annual measurements of compliance costs as a stage in budget follow-up. Such measurements should be viewed with some caution however as the margin of error can be greater than possible changes in the tax system. On the other hand measurements of compliance costs before and after sweeping tax reforms have been able to provide more reliable results.

¹¹ Sanford (1995)

¹² *Cashier de droit fiscal international*, vol. LXXIVb, Kluwer, The Netherlands, 1989.

Another trend in recent years is investigating how changes in legislation influence a specific area instead of measuring total compliance costs. In the UK mandatory analyses of compliance costs are performed when new legislation is introduced that might affect businesses. These analyses focus on the additional burden that some particular rule of law entails. Australia too has a similar procedure where a detailed account is given of the consequences of a new tax or of a change in the tax law.¹³ In Sweden Nutek is carrying out measurements of compliance costs in a number of different areas using a special method developed in the Netherlands. The idea is that measurements are to be updated continuously in order to follow the trend of compliance costs.

2.5 Compliance costs and voluntary participation

As already mentioned above some of the most important principles for a tax system are efficiency, equity and simplicity. Expressed in another way these principles mean that the tax system should influence our behaviour in as low a degree as possible, that taxes should be distributed fairly between different categories of tax payers and that it should be simple to understand and fulfil one's obligations. Sometimes a fourth principle is added, predictability, the point of which is that individuals and businesses must be able to assume that the laws and rules that are in force when they make decisions are not suddenly altered.

These principles may clash and many times it is convenience that is sacrificed in the aspiration to create as equitable a tax system as possible. If following the rules then demands such a great deal of resources that many instead ignore them the final result is an increase in inequity, i.e. the opposite effect.

The traditional theories of optimal tax systems have tended to ignore the effects on equity and efficiency that arise as a result of compliance costs and the costs of maintaining a tax system. Interest is nevertheless increasing in the effects of compliance costs on the structure of the tax system and its consequences for equity and efficiency. Empirical studies that examine the correlation between compliance costs and voluntary participation would be an important contribution to this field.¹⁴

2.6 International experience

Factors influencing compliance costs

The magnitude of compliance costs is determined by a number of different factors, of which the complexity of the tax system and the demands of tax administration are of decisive importance. Generally speaking, the more complex a tax system is, the higher are the compliance costs. Similarly, an efficient and service-oriented tax administration can lower compliance costs. The importance of tax administration for compliance costs is especially obvious in certain third world countries where inefficient and corrupt tax administrations create enormous compliance costs for businesses, often with a large unofficial sector as a

¹³ In the UK these analyses are called Compliance Costs Assessments (CCAs) and in Australia Tax Impact Statements (TIS).

¹⁴ Evans et al. (ed.): Tax Compliance Costs: A Festschrift for Cederic Sandford, 2001 (Chap.2: Linkages between tax compliance costs and taxpayer compliance research by John Hasseldine.)

result. There are of course purely individual reasons for the extent of compliance costs. Some businesses are better at organising their bookkeeping and accounting than others and this lowers their compliance costs.

Since the middle of the 1970s, when the interest in compliance costs began to spread to a wider circle, compliance costs have been studied in many places in the world. The purpose of these studies has been, among other things, to try to explain what factors influence the magnitude of compliance costs.

The one most important explanation of the magnitude of compliance costs in kronor is the size of the business. In addition, compliance costs are strongly regressive which means that in relative terms they affect small businesses more severely than large ones. In proportion to turnover compliance costs fall as turnover increases. In a study from the Netherlands the compliance costs of businesses per employee were thirty times higher for small businesses than for large ones.¹⁵ In another study from the UK small business had costs that were 30 to 40 per cent higher than the largest businesses.¹⁶ The big difference between large and small businesses can partly be explained by the fact that compliance is associated with certain fixed costs which diminish in importance as the business grows. It has been observed that there is a learning effect in businesses which means that a newly started business has in general greater compliance costs than businesses that have been active for a longer period of time. Several studies have also shown that compliance costs differ between businesses in different sectors of commerce and industry. In a study from the USA measuring business income tax companies in for example the mining, oil and gas industries had higher compliance costs than others, whereas businesses in wholesale and retail trade had lower compliance costs.¹⁷ In a study from the UK compliance costs for VAT also differed between different branches of commerce and industry. In this case the differences appeared to be due primarily to the number of tax rates. At the time of the study there were two different tax rates in the UK and it was apparent that businesses with two rates of tax had higher compliance costs.¹⁸ In another study from Holland the difference proved to be chiefly due to the fact that the sizes of the average businesses in the different branches were different.¹⁹

In the same way that different requirements imposed by the legislator and the tax authority can give rise to different compliance costs between different branches of commerce and industry the costs between different forms of business can vary too. It is thus not the business

¹⁵ Allers, Maarten: *Administrative and Compliance Costs of Taxation and Public Transfers in the Netherlands*, 1994.

¹⁶ Sanford (Ed.): *Tax Compliance Costs Measurement and Policy*, 1995 (chapter 4: *The Compliance Costs of the United Kingdom Tax System* by Michael Godwin.)

¹⁷ Sanford (Ed.): *Tax Compliance Costs Measurement and Policy*, 1995 (Chap. 7: *Recent Tax Compliance Research in the United States* by Marsha Blumenthal och Joel Slemrod.)

¹⁸ Sanford (Ed.): *Tax Compliance Costs Measurement and Policy*, 1995 (Chap. 4: *The Compliance Costs of the United Kingdom Tax System* by Michael Godwin.)

¹⁹ Sanford (Ed.): *Tax Compliance Costs Measurement and Policy*, 1995 (Chap. 8: *The Compliance Costs of the United Kingdom Tax System* by Michael Godwin.)

sector or the form of business in themselves that determine the magnitude of compliance costs but the demands that the legislator and tax administration place on the business.

As mentioned above the compliance costs of businesses are also linked to the administrative costs of the tax authority. Frequently, administrative costs and compliance costs move in the same direction i.e. a simplification of the tax laws leads most often to a reduction in both types of cost. But this is not always the case. The tax authority can, in order to reduce its own costs, transfer certain costs to businesses. An example of this would be increasing the amount of mandatory information to be supplied by businesses to reduce the costs of inspections. This can admittedly be justified in certain circumstances.²⁰ In view of the negative effects of compliance costs the tax authority must nevertheless consider carrying a certain cost in order to lower compliance costs. It may however be easier to transfer costs to businesses because their costs are less visible and more difficult to measure.

The magnitude of compliance costs

One of the most extensive surveys of compliance costs was conducted in the UK at the end of the 1980s under the leadership of Cedric Sanford²¹ By analysing the results of several different studies he was able to make a total compilation of all the compliance costs of the tax system for the year 1986-87. According to his calculations the total compliance cost for the tax system amounted to 4 per cent of all tax revenues, corresponding to 1.5 per cent of GDP. Income tax and VAT had the highest compliance costs in proportion to tax revenue.

In Australia too an extensive survey of compliance costs was carried out in the latter part of the 1980s. It showed that compliance costs for the largest taxes in Australia amounted to close to 12 per cent of tax revenues, or 2.1 per cent of GDP for the income year 1990-1991. Income taxes were responsible for the greatest part of compliance costs, and it was above all costs of the income tax paid by businesses that were very high in proportion to revenues. The compliance costs for VAT however were only 2.2 per cent of total compliance costs.

In New Zealand compliance costs for the largest taxes amounted to 2.5 per cent of GDP in a measurement that was carried out in 1990-1991. Here too compliance costs of the income tax paid by businesses, viewed relatively, were extremely high.

In a further study from 1989 it was shown that the total compliance costs in Holland amounted to 4 per cent of total tax revenue or about 1.5 per cent of GDP. Compliance costs for VAT were 29 per cent of total compliance costs.

It is difficult to compare compliance costs between countries. The structure of the tax system and the organisation of tax administration have different configurations in different countries. Moreover, the methods of measurement often differ as do the definitions of compliance costs. Even if many objections can be made to comparisons of this kind they can nevertheless give a rough estimate of the relative complexity of a tax system or the efficiency of tax administration especially in the case of comparisons of total compliance costs. We can for

²⁰ A further dimension is the distribution of compliance costs between different categories of tax payers. For example, an increased compliance cost for businesses can result in lower compliance costs for many employees so that the cost to society totally is less.

²¹ Sanford(1989)

example conclude that total compliance costs in all the studies referred to above are relatively similar and are in a region between 1.5 and 2.5 per cent of GDP. This is not surprising as all the countries considered are industrial countries having fairly well developed tax systems and tax administrations. In addition all of the studies were performed employing relatively similar methods of measurement. However, comparing compliance costs for individual taxes can be considerably more complicated.²²

2.7 Studies of compliance costs in Sweden

Some studies of compliance costs resulting from taxation have been carried out in Sweden too. In the 1970s a Delegation for Business Returns (Delegationen för Företagens Uppgiftslämnande - DEFU) was established within the then budget department. DEFU had a case study carried out with interviews of 60 businesses²³, in which the time required by taxes (excluding filing tax returns) was looked at. The sample was not representative either with regard to geography or to size.

In the spring of 1983 the Swedish Employers Confederation (SAF- Svenska Arbetsgivareföreningen) conducted a study of 12 businesses in the Stockholm area. The sample was not representative (large businesses were overrepresented). The survey related to VAT, customs duty, excise duties, PAYE tax, social security contributions and tax returns. The businesses were visited and were allowed to make their own estimates of time consumption, Data-processing costs etc. including external costs. The costs varied a great deal between the businesses, particularly with regard to VAT and filing returns. For this reason no conclusions were drawn from this study regarding total costs.

An ESO (Expert Group for Studies of Public Economy) survey²⁴ in 1983 made a complete survey of public costs for tax administration. In connection with this a rough estimate was made of the extent of employers' and businesses' collaboration in tax collection and taxation in other respects. That estimate was based on data from the SAF study, which, on the basis of statistics for the distribution of employees by employer in different income classes and on taxation statistics, was grossed up to cover the entire country. SAF has criticised the calculations due to their uncertainty.

The first more extensive study of compliance costs in Sweden was carried out in connection with a follow-up of the tax reform of 1990-1991.²⁵ The Committee for the Evaluation of the Tax Reform (KUSK) was appointed at that time and was tasked to coordinate research around

²² The results of all these studies are given in Sanford (Ed.): *Tax Compliance Costs Measurement and Policy*, 1995.

²³ *Collaboration in filing returns. Report of the Delegation for Business Returns*. 1981.

²⁴ Department of Finance: *Administration costs of our taxes. Report to the Expert Group for Studies of Public Economy*. Ds Fi 1983:32.

²⁵ Malmer, Håkan, Persson, Annika & Tengblad, Åke: *The tax reform of the century. Effects on the operating costs of the tax system, tax planning and tax cheating. Follow-up of the tax reform 1990-1991, 1994. (Århundredets skattereform. Effekter på skattesystemets driftskostnader, skatteplanering och skattefusk. Uppföljning av skattereformen 1990-91, 1994.*

different effects of the tax reform. Part of this evaluation was to study how the tax reform had influenced the costs of the tax system at the tax authorities and those liable to pay tax. The study thus covered both administrative costs and compliance costs and covered all categories of tax. Similar to many foreign studies of compliance costs in the 1980s and 90s the main source of basic data for calculation of compliance costs were questionnaires sent out in advance to businesses, accounting consultants etc. The total number of respondents in the study was 1,207, of which about half were concerned with income tax and half with VAT and employers' contributions.

The total operating costs (administrative costs + compliance costs) for the tax system was calculated to be SEK 14 thousand million, which corresponded to 1.0 per cent of GDP and 2 per cent of total tax revenue. According to the calculations compliance costs were twice as large as the administrative costs. Totally compliance costs amounted to about SEK 9.3 thousand million or 1.32 per cent of total tax revenue. Income tax was responsible for the largest part of the compliance costs, 58 per cent, followed by VAT with 35 per cent. If the cost is put in relation to the income from the same tax then VAT is the most costly. According to the study the compliance cost for VAT amounted to 2.5 per cent of the income from VAT whereas the compliance cost of income tax amounted to 1.7 per cent of income tax. Just as in the studies performed abroad it was found that also in this study the small businesses carried the greater part of the compliance costs.

The compliance costs of individuals were followed up in a study in 1998²⁶. It showed that the compliance costs for the tax returns of individuals had risen by about 17 per cent after 1993. The increase in compliance costs has several explanations. One is that considerably more individuals filed returns with value-added profits/losses - 1.7 million persons in 1998 compared to slightly less than 400,000 in 1993. A still more important reason is however that close to 100,000 more persons declare VAT in their regular income tax return - an increase from 279,000 in 1993 to 372,000 in 1998. In addition it cannot be excluded that it might have become more complicated for self-employed persons to fill in a tax return.

Nutek's measurements of the administrative burdens on businesses

Since the autumn of 2003 Nutek²⁷ has been tasked by the government to carry out measurements of the administrative costs in businesses in a number of areas. Measurements in the area of taxes began in January 2004 with a pilot measurement of the effects of the Value-Added Tax Act and continued with measurements of the costs attributable to the Income Tax Act and the Tax Payment Act with related legislation, as well as the measurement of costs attributable to four excise duties.²⁸ In February 2005 a report on this work was submitted to the Ministry of Industry Employment and Communication. The results of these measurements are to be the foundation of the government's work on improving rules. The government has

²⁶ National Tax Board: What it means to file a tax return! The compliance costs to individuals for filing tax returns in 1998. Report no. 1999:9. (RSV: *Så här är det att deklarerera! Individernas fullgörandekostnader för inkomstdeklarationen 1998*. RSV Rapport 1999:9.)

²⁷ Swedish Agency for Economic and Regional Growth

²⁸ The Act on tax on alcohol, the Act on tax on waste, the Act on tax on energy and the Act on tax on adverts and advertising. (Lagen om skatt på alkohol, lagen om skatt på avfall, lagen om skatt på energi och lagen om skatt på annonser och reklam).

set a goal of reducing the burden of rules on businesses in the tax area by 20 per cent before 2010. By updating the results in step with changes in the rules it will be possible to follow the development of costs over time. As the measurements are being carried out using the same method in several countries costs can also be compared internationally.²⁹

According to Nutek's measurements the administrative costs in the field of tax, respecting the definitions of the measurements, amount to SEK 5.3 thousand million per year. The costs for the Value-Added Tax Act comprise 51 per cent of the total costs or SEK 2.7 thousand million.³⁰

Nutek has used a special method for these measurements, the standard cost model - a method developed and used in the Netherlands since 1994.

The standard cost model is based on a 'bottom-up' approach meaning that measurements are based on individual requirements under laws (information requirements) that exist within a legal area. These information requirements mean that the business must draw up, store or transfer a number of items of information to public authorities and/or third parties. This information is provided by means of a number of administrative activities associated with a cost incurred by the business. Such costs constitute an administrative cost. The foundation of this model is that administrative costs are assessed on the basis of how much time a business of normal efficiency devotes to fulfilling the requirements of the law in the manner in which they are intended to be complied with.³¹

It should be noted that Nutek's definition of administrative costs can not be equated with the concept of compliance costs. The results of Nutek's measurements must instead be seen as an estimate of the administrative costs of a normally efficient business related to the information requirements imposed by legislation. Annexe 2 contains a more detailed description of Nutek's method.

²⁹ Besides the Netherlands and Sweden the following countries are conducting or planning to conduct measurements according to the standard cost model: Denmark, Norway, UK, Belgium and Estonia.

³⁰ The Income Tax Act is attributed 38 per cent (about SEK 2 thousand million), the Tax Payment Act 10 per cent (SEK 508 million and the four excise duties about 1 per cent (SEK 33 million).

³¹ Nutek, *The Business Sector's Administrative Costs in the Tax Area*, 2005

3 The conduct of the survey

Chapter 2 gave a theoretical background for the concept of compliance costs. We explained among other things how compliance costs can be classified in different categories, e.g. regular and temporary, voluntary and compulsory, internal and external as well as calculation and planning costs. It is one thing to define compliance costs in theory. In practice it can however be considerably more difficult to decide if a cost is to be classified as a compliance cost or not. Different costs will be included depending on the goal of a particular study. In order to be able to evaluate the results and compare it with other studies it is important to show clearly which costs the study in question is intended to include.

In this chapter we shall describe the survey carried out by the National Tax Board in 2005. We shall among other things describe which survey method has been used and which costs we have chosen to include in the survey. Annexe 1 gives a more detailed description of the statistical and other uncertainties that exist in the survey. Annexe 5 includes a technical report which describes the procedure in greater detail.

3.1 The postal survey

At the beginning of September 2005 a postal questionnaire was sent to 4,000 randomly sampled VAT registered businesses containing questions about how much time they had devoted to and what external costs they had incurred in handling VAT during the latest financial year. The questionnaire included questions about how burdensome the businesses experienced different aspects of handling VAT to be. The sample was drawn from Statistics Sweden's business register and was stratified as follows:

No. of employees	No. in sample
0 employees	1,000
1-4 employees	1,500
5-499 employees	1,500

The sample did not include VAT registered businesses that did not have a telephone number, nor did it include businesses with more than 499 employees or public authorities. Table 1 below shows the number of businesses in their respective groups.³² The squares shaded grey indicate those groups of businesses not included in the sample. To this must be added VAT registered public authorities of which there were 1,035 in 2005.

³² The number of businesses in table 1 differs somewhat from the number of businesses in the technical report. This is because the business register was consulted on two different occasions, once when the sample was to be drawn and once when the total cost of the population was to be calculated.

Table 1 VAT registered businesses 2005

No. of employees	VAT registered businesses	VAT registered businesses with telephone	VAT registered businesses without telephone
0- employees	631,854	392,698	239,156
1-4 employees	134,280	121,894	12,386
5-49 employees	57,960	57,846	114
50-499 employees	4,865	4,865	0
500-employees	425	425	0
Total	829,384	577,728	251,656

Certain groups of businesses have been excluded from the survey sample because their VAT accounting differs from other businesses. We have therefore chosen to estimate their costs in other ways than by means of the postal survey, see the next section 3.2.

Businesses that did not reply to the questionnaire received two reminders of which the last was accompanied by a new questionnaire. Among the businesses that did not reply to the survey after two reminders a random sample of 400 businesses was selected for telephone interviews.

In total 43 per cent of businesses answered the questionnaire. After telephone interviews the weighted response rate was 58 per cent. A technical report with a copy of the questionnaire is included in annexe 5. From an international perspective this is a very high response rate for a survey of this kind.

3.2 Business enterprises not included in the postal sample

As already mentioned, three groups of businesses were not included in the postal survey sample: VAT registered businesses with more than 499 employees, VAT registered businesses without telephone numbers and public authorities.

We elected to estimate the cost of handling VAT incurred by the large businesses i.e. businesses with more than 499 employees on the basis of face-to-face interviews. In our opinion handling VAT in many of the large businesses is so complex and difficult to analyse that it is not capable of summary in a postal survey. It would also have been difficult to construct a postal survey that would, all at the same time, suit small, middle -sized and large businesses.

The costs incurred by public authorities in handling VAT are also estimated on the basis of interviews.

In the case of VAT registered businesses that did not have a telephone number we have judged that they in general have a lower level of activity than businesses that do have telephone numbers and in turn have lower compliance costs. The costs in such businesses have been estimated to be 25 per cent of the costs in VAT registered businesses with telephone numbers in the same size category. This is a rough estimate but we judge that we are avoiding an overestimation of the compliance costs for this group.³³

³³ In annexe 1 there is an alternative calculation that shows the effects of this assumption.

3.3 Costs included in the measurement

As we have observed above it can be difficult to draw a line between what is to be included in compliance costs and what is not. In the questionnaire that was sent out to businesses we defined the handling of VAT as follows:

1. That part of bookkeeping that relates to the accounting of (deductible) input VAT and output VAT (to pay)
2. Calculation of VAT that is due for payment or for recovery
3. Filling in the VAT section of the tax return
4. Filling in EC sales list
5. Contacts with the Tax Board, your accountant and accounting consultant in matters relating to VAT
6. Reading VAT brochures, legislation and other information

This definition captures the day-to-day costs of handling VAT. On the other hand possible investment costs or so-called 'start-up costs' that businesses have incurred in the form of purchases or the development of special VAT programs or adapting accounting systems to preparing VAT returns are not included. For large businesses such investments can amount to considerable sums. We have however added a standard amount of 25 per cent of salary costs to represent indirect costs for each employee in those businesses that wholly or partly do the work of handling VAT internally. See further in the next section 3.4.

The definition of the handling of VAT used in the survey does not include time and resources devoted to tax audits. The Tax Board's audits often cover more types of tax than VAT and in many cases difficulties would arise in judging how much of the time of the audit was attributable to VAT and to other taxes respectively. The definition does however include contacts with the Tax Board. The idea is that time that has been devoted to answering VAT inquiries from the Tax Board, whether they have taken place in connection with audits or with other things, is to be included in the time devoted to handling VAT. We thereby avoid the risk of overestimating the total time, which would have been the case if tax audits had been included in the definition.

Another problem in calculating compliance costs of VAT is how to separate VAT accounting from day-to-day bookkeeping. Many businesses that rely on external help with VAT accounting also get help with everyday bookkeeping and closure of accounts procedures. For this reason we ask the businesses relying on external help with VAT accounting in the questionnaire if they also get help with day-to-day bookkeeping and accounts closure procedures, and, in that case, what they pay totally for all external help. In those cases where businesses reply that they get help both with the work of closing the books and day-to-day bookkeeping we have counted the cost of VAT to be one third of the total cost of external help. In the cases where they are assisted with only one of these two items we have counted the VAT compliance cost as one half.

A further aspect when the VAT compliance costs to businesses are to be calculated is the credit gains and losses that can arise in businesses due to the handling of VAT. This issue and attempts at certain estimates are presented in chapter 8.

3.4 The pricing of time

To calculate total compliance cost the internal time must be expressed as a cost. To calculate average cost per hour we have taken Statistics Sweden's (SCB) wage and salary statistics as a base and used average monthly salaries for bookkeeping and accounting assistants. In 2003 this was SEK 20,300. According to SCB's wage and salary statistics the average time worked by a full-time employee in the public sector is 165 hours per month which gives an hourly rate of SEK 123. We have added a 12 per cent holiday supplement and 32.8 per cent in employers' social security contributions. Businesses also have a number of indirect employee costs for rent, telephone, information technology infrastructure, training, office materials etc. We have therefore added on 25 per cent of salary to cover these costs.³⁴

Table 2 Average cost per hour of handling VAT, SEK

Monthly salary for bookkeeping and accounting assistants	20,300
No. hours worked per month	165
Salary/hr.	123
Holiday supplement	12%
Employers social security contributions	32,8%
Overhead	25%
Total cost per hour	229

The cost per hour calculated in this way is of course a simplification. From the survey we cannot distinguish the category of personnel into which the people handling VAT accounting fall. Probably the calculated cost per hour is in many cases too low. The total cost must therefore be seen as a minimum estimate. In our interviews with large businesses we have been able to determine in a better way who handles which tasks. For this reason we have chosen to work with two categories of personnel in such companies. The one group is the same as described above, i.e. accounting and bookkeeping assistants and the other group comprises business economists and salaried employees in personnel management. According to SCB's statistics the latter group had an average monthly salary of SEK 32,300 in 2003. This gives an average hourly rate of SEK 364 /hour if we use the same principle of calculation as for the first group.

³⁴ That we decided on 25% is due also to Nutek's using an overhead of 25 per cent when measuring business VAT compliance costs. Using the same overhead we increase the comparability of the two surveys.

4 Total compliance costs

4.1 Calculation of compliance costs

We have four categories of business to consider when compiling total VAT compliance costs. The largest group are those businesses included in the postal survey. To this must be added the costs to VAT registered businesses with more than 499 employees, VAT registered businesses without telephone numbers and public authorities. We begin here by presenting compliance costs for the respective groups and finally we present a total summary of VAT compliance costs

Businesses with less than 500 employees.

According to SCB's business register in November 2005 there are 577,303 VAT registered businesses with less than 500 employees. By grossing up the results of the postal survey to the whole population the total compliance costs for this group amount to SEK 5.5 thousand million.

Table 3 Compliance costs for VAT registered businesses in the postal survey sample

No. of employees	No. of businesses	Total cost (millions)	Average/business
0 employees	392,698	2,405	6,125
1-4 employees	121,894	1,729	14,182
5-9 employees	31,696	612	19,312
10-49 employees	26,150	621	23,760
50-499 employees	4,865	127	26,003
Total	577,303	5,494	9,516

Businesses without a telephone number

We judged that VAT registered businesses without telephone numbers have a lower level of activity, and consequently lower compliance costs, than businesses with telephone numbers. VAT registered businesses without telephone numbers have therefore not been included in the postal survey. Instead we have assumed that their compliance costs are equivalent to 25 per cent of the average cost for a corresponding business with a telephone number. The total number of businesses without telephone numbers was approximately 252,000 in November 2005. The total compliance costs for these businesses thus amounts to fully SEK 410 million according to this method of calculation.

Table 4 Compliance costs of VAT registered businesses without telephone numbers

No. of employees	No. of businesses	Average cost for business with telephone number	25% of average cost	Total cost (thousand SEK)
0 employees	239,156	6,125	1,531	366,181
1-4 employees	12,386	14,182	3,545	43,913
5-9 employees	103	19,312	4,828	497
10-49 employees	11	23,760	5,940	65
50-499 employees	0	26,003	6,501	0
Total	251,656	9,516	1,632	410,657

Businesses with more than 499 employees and public authorities

In total we interviewed seven businesses with more than 499 employees in the autumn of 2005. The sample for interviews was not random; instead we chose ourselves which businesses we wished to interview. Our starting point was to interview businesses belonging to different branches of commerce and industry in order to capture as many aspects of the work of handling VAT as possible. As a rule the interviews took about one hour and were based largely on the questions we ask in the postal survey in order to achieve comparability between small and middle-sized businesses.

We worked out the compliance costs for all businesses with more than 499 employees by dividing the total cost to all interviewed businesses for VAT by the number of employees in these businesses. This yields an average cost per employee of SEK 141. According to SCB's statistics there are slightly less than two million employees in businesses with more than 499 employees. Total compliance costs for this group thus amounts to slightly less than SEK 270 million.

Table 5 compliance costs for businesses with more than 499 employees

No. of businesses	425
No. of employees, total (thousands)	1,904
Cost/employee	141
Total (MSEK)	269

The work that public authorities devoted to handling VAT is more limited than that of businesses as it does not affect the whole range of their activities. The number of VAT transactions is considerably lower in the public sector. To form a conception of compliance costs incurred by public authorities we interviewed one authority and one municipality. On the basis of these interviews we estimated VAT compliance costs to be about SEK 63 per employee. According to SCB's statistics there are approximately 1,260,000 persons employed by public authorities. Thus the total compliance costs for this group amount to approximately SEK 79 million.

Total summary of compliance costs

Total compliance costs for authorities and businesses paying VAT are calculated to be approximately SEK 6.3 thousand million. Compliance costs for businesses with 0-4 employees amount to slightly more than SEK 4.5 thousand million which is 73 per cent of the total compliance costs. Businesses with less than 500 employees answer for approximately 4 per cent of total compliance costs, which corresponds to approximately SEK 270 million.

Table 6 Total compliance costs, SEK million

No. of employees	VAT registered businesses with telephone no.	VAT registered businesses without telephone no.	Businesses with more than 499 employees	Public authorities	Total
0 employees	2,405	366	-	-	2,771
1-4 employees	1,729	44	-	0	1,773
5-9 employees	612	0,5	-	0	612,5
10-49 employees	621	0,1	-	0,5	621,6
50-499 employees	127	0	-	2,5	129,5
500- employees	-	-	269	76,3	345
Total	5,494	411	269	79	6,253

4.2 How is time for internal handling of VAT allocated?

In the survey we ask businesses handling VAT internally to divide up the hours they devote to handling VAT internally proportionally between preparatory work, work preparing tax returns and finishing work. The various items were defined as follows:

Preparatory work: for example acquainting oneself with current legislation and assessing which rules are applicable

Work with the tax return: e.g. compiling supporting figures, drawing up the tax return/quarterly report, calculation of VAT due for payment or to be recovered and arranging for the tax return to be signed.

Finishing work: e.g. documentation, inquiries from the Tax Board and corrections of previously submitted tax returns.

It turns out, perhaps not unexpectedly that businesses devote most time to work with tax returns (62 per cent) followed by preparatory work (27 per cent) and finishing work (12 per cent).

Table 7 Distribution of internal time in handling VAT

	Portion of total time
Internal time –preparatory work	27%
Internal time- preparing tax returns	62%
Internal time-finishing work	12%
Total	100%

4.3 Compliance costs and tax revenues

When examining the compliance costs of a particular tax it is of interest to investigate how large they are in relation to the tax that is collected. The higher the compliance costs are in relation to the amount of the tax the more inefficient you may say the tax is.

In the year 2004 VAT amounted to approximately SEK 214 thousand million. We know from our study that compliance costs were approximately SEK 6.3 thousand million which means

that compliance costs comprise about 3 per cent of VAT revenue. This is an increase by 0.5 units since 1993 when compliance costs for VAT were 2.5 per cent of VAT revenue. Calculated in this way VAT compliance costs to businesses have increased by 20 per cent.

5 Development of compliance costs since 1993

It is difficult to evaluate the magnitude of compliance costs if one does not have anything to relate the costs to. One way of forming a conception of the magnitude of compliance costs is to investigate whether they increase or decrease over time. A clearly stated goal of the Tax Board is also that compliance costs are to decrease. In this section the results of the study performed in 2005 are compared with a study of VAT compliance costs from 1993.

5.1 The 1993 survey

5.1.1 The conduct of the survey

In connection with a follow-up of the tax reform of 1990-91, as mentioned earlier, a study was performed of the compliance costs of VAT.³⁵ The basis for the study was a postal survey carried out between November and December in 1993. The questionnaire was sent to 936 VAT registered businesses with between 5 and 499 employees which, after telephone contact, had declared that they were willing to take part in the survey. A total of 608 of these businesses answered the questionnaire signifying a response rate of 64 per cent.

The survey asked questions about how much time businesses devote to handling VAT. Two specific tasks were defined: day-to-day handling of VAT in the accounting of vouchers and the preparation of tax returns.

Regarding the time devoted to day-to-day handling of VAT the following question was put to the respondents: 'When booking incoming and outgoing invoices etc. you must decide whether input and output VAT are respectively tax-deductible or tax-liable, as well as coding and recording VAT in the accounts. Make a reasonable estimate of how many working hours were devoted to this category of work in your business during the latest financial year.'

Regarding the time devoted to preparing the tax returns businesses were asked the following question: 'When a tax return is to be submitted to the tax authority the VAT account must be balanced, the tax return must be drawn up and the VAT must be paid alternatively recovered. Estimate how many working hours were spent on this kind of accounting of VAT in your business during the latest financial year.'

The responding businesses had to specify the amount of time devoted to these two categories of work whereby the time used was valued at SEK 125 per hour. Besides the internal time consumed by handling VAT, the question was also asked if the businesses had relied on external assistance with handling VAT and, if so, how much they had paid for it. The total compliance costs were computed by summing the cost of internal time and the cost of external assistance.

³⁵ Malmer, Håkan, Persson, Annika & Tengblad, Åke: *The Tax Reform of the Century. Effects on the tax system's operating costs, tax planning and tax cheating. Follow-up of the tax reform 1990-1991.* (Århundradets skattereform. Effekter på skattesystemets driftskostnader, skatteplanering och skattefusk. Uppföljning av skattereformen 1990-91, 1994.

The survey did not include businesses with less than five employees or more than 499 employees, public authorities nor businesses that relied exclusively on an external bookkeeping agency. In order to compute total costs the costs for these businesses were estimated instead.

For businesses with more than 499 employees the cost was estimated at SEK 207 per employee and in the case of public authorities at SEK 165 per employee. For businesses with 0-4 employees an annual cost was estimated at SEK 4,000 per business. For businesses not registered for VAT (with an annual turnover below SEK 200,000) that file a VAT tax return in connection with the annual income tax return the cost was estimated at SEK 500 per year.

5.1.2 Differences between the two surveys³⁶

As we can see in the foregoing accounts the survey methods of 1993 and 2005 are not identical. The biggest difference is that the 1993 survey chose to estimate the cost to small businesses, i.e. businesses with 0 to 4 employees, instead of allowing them to be included in the sample for the postal survey.³⁷ In the 2005 survey these businesses were included in the postal survey sample. The compliance costs for really large businesses (more than 499 employees) and public authorities have nevertheless been estimated in both studies. Another difference is that in the 1993 study the questionnaire was only sent to businesses that had indicated per telephone that they were willing to answer the survey. In year 2005 questionnaires were sent to a random sample of businesses without any prior qualification. There are also other differences. The questions are not formulated in an identical way in all respects and the choices of answers are different. Considering the development of the regulatory framework and changes in the way businesses handle VAT in recent years it would not have been reasonable to send out an exactly identical questionnaire. In working with the 2005 survey we have nevertheless striven to make the surveys capable of comparison and this is reflected in the construction of questions and the stratification of the sample. For this reason, in our judgement, despite the differences, the surveys are sufficiently similar to permit meaningful comparison.

5.1.3 Compliance costs 1993 and 2005

A necessary condition of being able to compare the results from 1993 with those of today is that we eliminate price differences between the years. We have therefore converted the costs in the 1993 survey to the current price level by converting time expended to SEK 229 per hour instead of SEK 125 per hour. In converting to a total cost we have used SCB's statistics for the number of VAT registered businesses in the years 1993 and 2005.³⁸

³⁶ Annexe 1 examines further the uncertainties that are present in the comparison of the results of the two surveys.

³⁷ The estimate was made *inter alia* with the help of data provided by the Swedish Association of Consulting Accountants (Sveriges Redovisningskonsulters Förbund, SRF)

³⁸ In 1993 there were 280,000 non-registered businesses (with an annual turnover below SEK 200,000). Compliance costs for these businesses were estimated in 1993 to be SEK 500 per business and year. In the comparison in table 8 above their cost is converted to today's price level and is included in the group 0-4 employees.

Table 8 Comparison of compliance costs of VAT 1993 and 2005

	No. of businesses		Average cost		Total cost m. SEK		Change		
	1993	2005	1993	2005	1993	2005	Volume	Cost	Net
0-4 employees	634,908	766,134	3,399	5,931	2,158	4,544	778	1,608	2,386
5-9 employees	24,896	31,799	34,330	19,266	855	613	133	-375	-242
10-49 employees	19,140	26,161	39,626	23,752	758	621	167	-304	-137
50-499 employees	3,930	4,865	67,538	26,003	265	127	24	-163	-139
500- employees	416	425	597,984	633,991	249	269	6	15	21
Public sector employees	1,142	1,038	203,297	76,431	232	79	-*	-*	-*
Total	684,432	830,422	6,601	7,444	4,518	6,253	1,108	780	1,888

* We have elected not to compare costs for public sector employees between the two years. The estimate made in the survey of 1993 was not based on the results of any investigation and in our judgement the estimate was too high.

Viewed as a whole compliance costs have increased by a full 40 per cent or by approximately SEK 1.9 thousand million since 1993. The increase can be divided into a volume effect, slightly more than SEK 1.1 thousand million, and a cost effect, slightly less than SEK 800 million.

The volume effect is the effect due to the increase in the number of businesses. Totally, the number of VAT registered businesses has increased by slightly less than 150,000 businesses since 1993. The number of businesses has increased in all groups except VAT registered public authorities, which means that the volume effect is positive for all groups except public authorities. Businesses with between 0 and 4 employees account for 90 per cent of the total increase, about 130,000 businesses.

By the term 'cost effect' we mean the effect of the change in the average cost of handling VAT. Here we can affirm that there are large differences between the small businesses on the one hand and the middle-sized and large businesses on the other. For small businesses the average cost of handling VAT has risen by fully SEK 2,500 per firm, an increase by about 75 per cent. For the group as a whole this means fully SEK 1.6 thousand million in increased compliance costs. For all other businesses (besides businesses with more than 499 employees) the average cost has instead decreased. We observe the largest decrease in businesses with between 50 and 499 employees. Here the average cost has fallen by fully SEK 41,000 per firm and year.

Thus it is the small businesses that in principle account for the entire increase in compliance costs since 1993, both in respect of volume and of cost. It is even so that the total increase for this group is greater than the total increase for all businesses because other businesses have seen their costs decrease.

The division into both a volume and a cost effect yields valuable insight into how we are to understand the increasing compliance costs. That compliance costs increase due to the increase in the number of businesses (volume effect) is natural. That businesses, in this case only small businesses, are forced to spend more resources on handling VAT (cost effect) is on the other hand a problem. In section 5.2 below we take a closer look at what can be the cause of this development and what are its consequences.

5.2 Important factors behind the change in total compliance costs

There are of course a number of causes behind the changes in compliance costs that have occurred since the previous study was performed in 1993. In this section we describe more in detail the three factors which we judge to have been of most importance for the change. The first is how the demands made by the VAT rules on each individual business have changed. To this may be added the further dimension of how the costs of altered rules change over time. The second factor is the trend of administrative support in the form of hard and soft ware. The third factor is the development of commerce and industry both with regard to the change in total volume of businesses and regarding the development of the total structure of commerce and industry. The first two factors influence compliance costs both at the level of society as a whole and at the level of the business enterprise. The third factor has no bearing on the individual firm but is important for total compliance costs.

5.2.1 The change in VAT rules

This section describes briefly the largest and most significant changes in the VAT system since the tax reform in 1991. For a more detailed description of the development of the rules since the introduction of VAT in 1968 see annexe 3.

The tax reform

After the tax reform VAT was uniform and the same in respect of tax liability and tax rates. All professional sales of goods and services were in principle covered by VAT. As the VAT system should be uniform and neutral in respect of competition there was only one rate, which was 25 per cent irrespective of which goods and services were being sold. Those liable for tax with a turnover above SEK 200,000, and those liable for tax but who were not required to file an annual tax return, were to be registered for VAT and report VAT by filing a special VAT return. The taxable period was two calendar months and the return was filed in the second month after the end of the taxable period. Those liable for tax with an annual turnover that did not amount to 200,000 annually were normally required to report VAT once a year in the general income tax return.

Quite soon after the tax reform the VAT rules began to be changed. The most important changes are described briefly in the following.

Increased number of tax rates.

The principle of a neutral and uniform tax rate was abandoned in 1992 when a VAT rate of 18 per cent was introduced for certain goods and services. This rate was later raised to 21 per cent. After some time it was accompanied by another tax rate of 12 per cent. A little more than two years after the tax reform food, restaurant services, hotels and travel were taxed at reduced rates. The 21 per cent rate was abolished in 1996. The tax on food was at the same time reduced to 12 per cent. The number of rates remained unchanged however as a VAT of 6 per cent was introduced for daily newspapers and for entrance fees to cinemas. In 1997 tax liability was expanded to include certain goods and services that previously had been tax-exempt. This included entrance fees to concerts and theatre performances, entrance fees to certain sports events and certain educational services.

New Value-Added Tax Act

In 1994 a new value-added tax Act came into force. The structure of the new Act and the system by which it functions differ from the previous Act. The intention behind the new Act was to create a more lucid and uniform law as well as to make it better adapted to the regime in force within the EU.

EU membership

Sweden's membership of the EU entailed extensive changes in its VAT. Membership meant not only that the Swedish VAT legislation was adapted to the directives governing value-added tax legislation in the European Community (EC), but also that special rules were introduced regarding trade with goods and services between countries in the EC. Perhaps the largest changes were the introduction of inter-community acquisitions, quarterly tax returns and reporting triangular trade.

Inter-community acquisitions mean that businesses purchasing from a VAT-registered firm from another EU country would no longer be required to pay import VAT to the Swedish Customs. Instead VAT is charged to the business itself so that the latter enters this into its regular accounts as tax to be paid, so-called acquisition tax. A business that has made an inter-community acquisition may then deduct the same amount as has been paid in acquisition tax according to the general rules for deduction of input tax.

Businesses that have sold goods to a VAT registered business in another EC country are obliged to report this sale in a quarterly tax return. The reason for introducing such returns is to maintain the monitoring of taxation of trade in goods between EU countries.

Special rules apply to so-called triangular trade. Triangular trade occurs when three VAT registered businesses in different EC countries are involved in a transaction and the goods are delivered directly from one of the countries to the business in the third country.

Changed taxable periods and reporting dates

At the beginning of 1996 the taxable period for those businesses reporting VAT by tax returns was changed from two months to one month. For the largest businesses (today the category large business includes companies with a turnover of at least SEK 40 million) the date for filing the return was brought forward to the 20th of the month after the month to which the tax return applies. Other businesses would as previously file their tax return no later than the 5th of the second month after the month to which the tax return applies. At the same time as the taxable period was curtailed the turnover threshold determining which businesses were to report VAT in the annual income tax return was raised from SEK 200,000 to SEK one million.

The next big change regarding returns and payment of VAT took place in 1998 through the introduction of a tax return which is common to both VAT and employers' social security contributions. In connection with this the dates for filing VAT returns and paying VAT were changed. For small businesses this meant that a VAT return is to be filed and tax paid not later than the 12th of the second month after the month to which the tax return applies, in other words, an extension of the time limit by one week. For large businesses the date of filing the

return was postponed by six days until the 26th day of the month after the month to which the return applies.

At the same time as the tandem tax return was introduced a new payment system was also introduced for business taxes. Every business was given a clearing account for taxes and charges kept by the tax authority on which all taxes are recorded. Since 2003 businesses have access to their tax clearing accounts on the Internet.

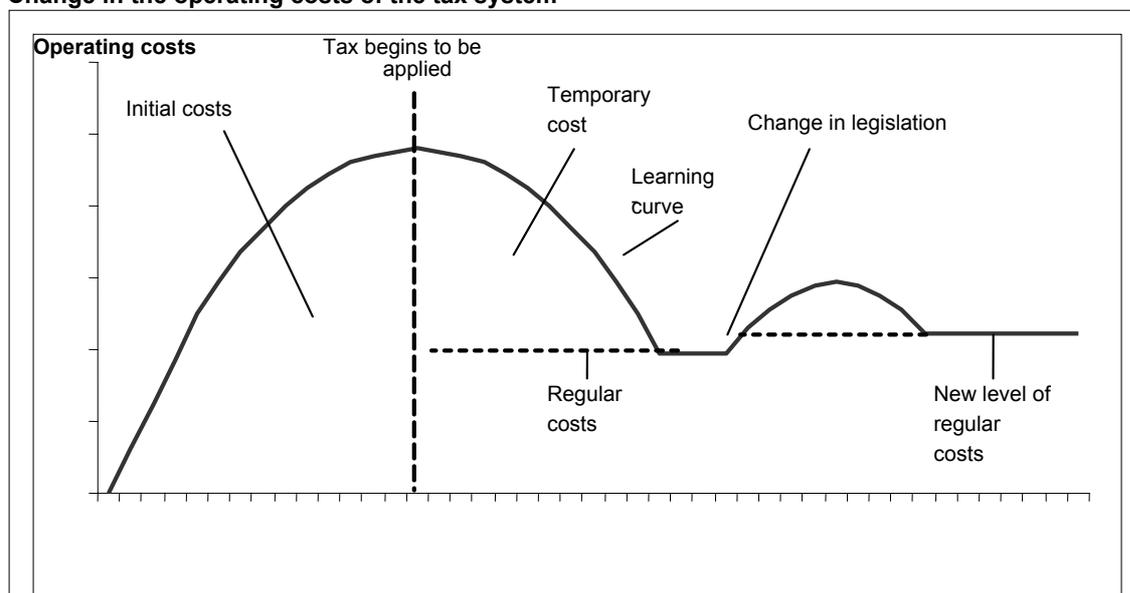
The most important changes in VAT rules since the tax reform in 1991

Year	Change
1992	- The tax rate for food, restaurant services, travel, hotels etc is lowered from 25% to 18%
1993	- The tax rate for food, restaurant services, travel, hotels etc is increased from 18% to 21%. Later in the same year the tax rate for <i>inter alia</i> hotels is lowered from 21% to 12%.
1994	- A new value-added tax law is introduced. Voluntary tax liability for business premises is introduced.
1995	- Sweden joins the EU which <i>inter alia</i> entails the introduction of rules governing inter-community acquisitions, taxation of acquisitions and quarterly tax returns as well as an increase in the tax rate for restaurant services from 21% to 25%.
1996	- The tax rate for food is lowered from 21% to 12%. - Daily newspapers and entrance to cinemas, previously exempt from taxation, now begin now to be taxed with VAT at 6% - The period between tax returns is curtailed from two months to one month. At the same time the date for filing tax returns and paying VAT is changed for large businesses to one month after the taxable period. - The threshold for reporting VAT in the annual tax return is changed from 200 thousand SEK to 1MSEK.
1997	- A number of areas, previously exempt, are now taxable, <i>inter alia</i> , entrance fees to certain sports events, concerts and theatre performances and certain educational services.
1998	- A common tax return is introduced for VAT and employers' social security contributions. -The clearing account for taxes and charges is introduced. -Dates for filing tax returns and payment are put back.
2001	-The tax rate for conveyance of persons is lowered from 12% to 6%. -The tax rate for entrance to zoos lowered from 25% to 6%.
2002	-The tax rate for books and magazines is lowered from 25% to 6%.

Initial costs

When the change in compliance costs over time is studied another dimension worthy of attention emerges. This dimension constitutes the initial costs that arise when new taxes are introduced or existing rules are changed. This is valid for the operating costs of the tax system as a whole i.e. both the costs of the authority with jurisdiction and the costs that arise for those liable for tax. When the tax or the new rules have been applied for some time and their handling is managed in the most efficient manner possible, a large part of the initial cost has been eliminated. The remaining cost is called the tax's regular cost. In other words there is a difference in the cost of the tax in the short and the long run (see further the reasoning on regular and temporary costs in section 2.1)

Change in the operating costs of the tax system



Source: ²Malmer, Håkan, Persson, Annika & Tengblad, Åke: *The Tax Reform of the Century. Effects on the tax system's operating costs, tax planning and tax cheating. Follow-up of the tax reform 1990-1991.1994.* (Århundradets skattereform. Effekter på skattesystemets driftskostnader, skatteplanering och skattefusk. Uppföljning av skattereformen 1990-91, 1994.

As shown in the summary above and in annexe 3 changes have taken place throughout the entire lifetime of the VAT system. During certain periods they have been greater and more frequent than during others. The periods during which no changes have taken place have however been few and brief. From this it follows that total compliance costs on the whole always include initial costs. They vary, however, in magnitude over time.

If the regulatory framework for VAT is looked at more closely it may be observed that briefly before the 1993 survey reduced rates of tax were introduced for food, restaurant services, hotels and travel. Briefly after that these rates of tax were changed once again. Thus at the same time as the first survey a fair number of rather extensive changes had been made in the regulatory framework, which most probably resulted in higher compliance costs both of a temporary and permanent kind. When we observe the changes in the VAT system before the 2005 study (annexe 3) we see that they are of a lesser and more marginal kind. Possible initial costs ought to have been considerably greater in the 1993 survey than in the present one.

5.2.2 Computer aids within businesses

Another significant factor for the magnitude of the total compliance cost over time is how computer programs and similar aids to VAT accounting have developed. This section describes briefly what has occurred in this area since the beginning of the 1990s, i.e. during a period of fifteen years. The first part describes the development in this area of standardised accounting and tax programs. This description is based principally on interviews with representatives of computer software companies. The second part describes what has happened within a number of large firms that have their own tailor-made systems for VAT accounting. This part is based on interviews with a number of large firms.

Standardised computer aids

The computer software companies interviewed all claim that VAT rules have become considerably more complicated over the last fifteen years. The biggest change occurred after Sweden's entry into the EU, which made considerable alterations in programs necessary. The software companies state that they have constantly adapted to the changes in the regulatory framework so that handling VAT has not been complicated to any great extent for the users. The programs that are available on the market manage as a rule to produce what is generally speaking a complete VAT report on the basis of day-to-day bookkeeping. In most cases the data in it can be transferred to the VAT return without any manual operations. What is demanded of the user is that the day-to-day coding is done properly and that the special VAT codes that are linked to the accounts are used correctly. According to the software companies, a person that has received 2 to 3 days training should be able to manage the VAT accounting in a business with about ten employees.

The most important change for businesses is, according to the software companies, the cost of programs and hardware. General computerisation began in the late 1980s. After that a successive increase in the use of computers took place and ten years later all businesses were computerised on the whole. As a result of falling prices for both hard and soft ware, combined with general computer maturity it has become profitable for businesses of increasingly smaller size to handle VAT internally. In other words, in the opinion of the software companies, increasingly less business volume is required if the benefits of a program are to be greater than the cost. In the course of time the market for tax and accounting programs has also become more differentiated and there are now specially adapted programs for different categories of business, e.g. there are special programs for different branches of commerce and industry and for different sizes of businesses.

Tailor-made computer support

All of the large businesses (with more than 500 employees) that were visited in connection with this study have their own tailor-made systems for handling VAT. In all of these businesses the systems for handling VAT are more or less linked to other systems for accounting, financial control and follow-up. In cases where the businesses are geographically scattered, having departments, branches or shops at other locations, reporting to some central point where VAT is handled is done automatically. In none of the businesses visited does reporting to a central VAT function take place by manual procedures.

The development of these systems has entailed significant costs and has required considerable resources. They presume well documented routines for handling and internal control. Most of the businesses visited are of the opinion that the regulatory framework has become

considerably more complicated over the last ten to fifteen years. Many point to EU membership as an important cause of this. The representatives of businesses that were interviewed consider however in most cases that the computer systems that have been developed have to a large extent compensated for the increased complexity. In certain respects handling VAT can even have been simplified as among other things the need for manual summaries, reconciliation reports and controls may have decreased. Businesses with sales that are governed by a more differentiated regulatory framework, e.g. when tax is charged according to different tax rates or according to rules for the marginal taxation of profit, have despite the complexity in many cases been able to avoid manual handling thanks to well functioning routines and computer systems.

5.2.3 The structure of commerce and industry

In the introduction to this section it was said that the change in the structure of commerce and industry is of great significance to the total compliance cost and thereby also in the discussion of taxation's total costs to society. This has many aspects. An essential one is how different changes in rules are to be seen in relation to one another. For example, a rule may have marginal importance to an individual business but if it affects many then total compliance costs are influenced to a high degree. In the contrary case a rule may cause an individual business heavy costs but if this business belongs to a category that includes only a small number of businesses then the influence of the specific rule on total compliance costs is marginal. The last example begs further questions. One may be what is the relevance of the tax rules to the fact that there are so few businesses in the category in question. Is it the complicated rules that are the cause of there being so few businesses or is it because they operate on a market with weak demand? If the first is the case - are the rules placing obstacles in the way of a healthy development of the economy? Is a future growth industry being hampered by complicated rules?

The change in commerce and industry over the last decade.

According to Statistics Sweden's Business Register the number of businesses in Sweden in 1993 was 493,070. By 2004 the number had increased to 870,189, which is an increase by 76 per cent. The largest part of the increase is because most of the smallest businesses (turnover up to SEK 200,000) were not included in the statistics before 1997. These businesses, which as a rule reported VAT in their annual income tax return, were not registered for VAT before this time and were by definition not covered by the statistics. The effect of the altered definition for businesses can be calculated out to be approximately 215,000. The remaining increase of the number of businesses, about 160,000 can thus be attributed to volume growth.

Table 9 Businesses by branch of commerce and industry 1993 and 2004 (SNI [Swedish Industry Codes] 1992 and SNI 2002 respectively)

	1993	2004	Percentage change
	No. of businesses	No. of businesses	93-04
A-B Agriculture, hunting, forestry and fishing	62,565	174,224	178%
C-E Industrial sector	40,804	58,857	44%
F Construction	45,663	60,375	32%
G-I Trade and communications	152,037	174,768	15%
J-Financial Intermediation	3,272	6,454	97%
K-Real estate, renting and business activities	102 985	216,949	111%
L-Public administration and defence; compulsory social security	456	564	24%
M-Education	3,129	12,865	311%
N-Health and social work, veterinary activities	8,395	23,778	183%
O-Other community, social and personal service activities	34,162	84,579	148%
Other and branch unknown	39,602	56,776	43%
Total	493,070	870,189	76%

Note: The table includes all legal entities and physical persons registered for VAT and/or as employers.
Source Statistics Sweden

The table above shows that the increase in the number of businesses varied greatly between different sectors. The problem of comparing the two years makes it difficult on the other hand to see any pattern in the changes. An attempt to do this is made in the next section, which contains a review of a more historical character.

*The historical development of the economy*³⁹

The economy is in constant development. New and more efficient techniques of production arise that replace old production techniques. In this way resources are liberated that may be used in the production of new goods and services that previously were not present on the market.

This development goes on constantly and influences uninterruptedly the structure of commerce and industry. Economic historians can however in a longer historical perspective perceive that the economy develops in leaps. Industrial development is often divided into three phases.

The development of the Swedish economy is described below briefly from the transformation of agriculture in the late 18th century to the changes that can be discerned in today's post-industrial society.

The transformation of agriculture began at the end of the 18th century. The transformation was a result of the land division reforms, whereby the former mediaeval village organisations were dissolved. Instead they were replaced by larger integrated properties worked by freeholding farmers. The old organisation that featured local self-support meant greater security for

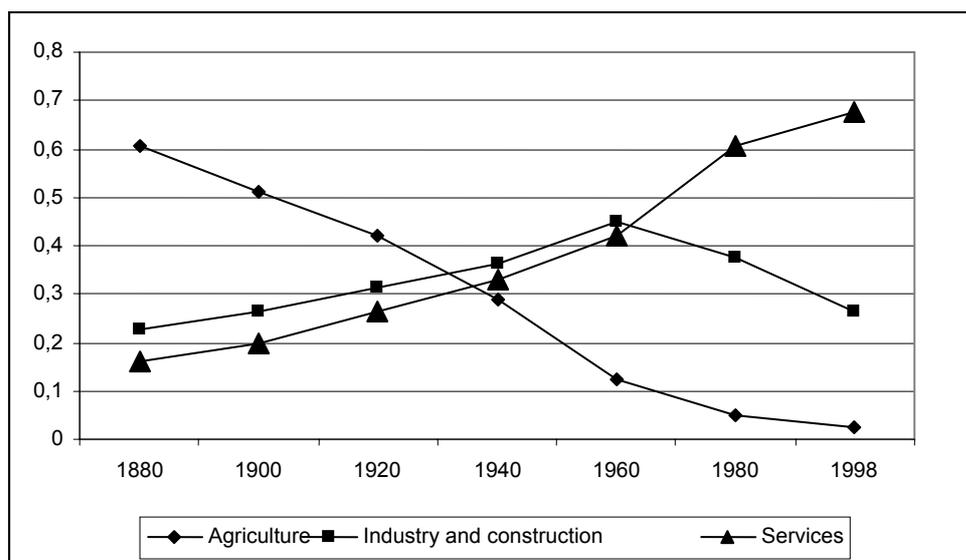
³⁹ This section is a very brief and freely adapted summary of Schön, Lennart, A Modern Swedish Economic History, *En modern svensk ekonomisk historia*, 2000, SNS förlag, Stockholm.

individual farmers within the community of the village. Society was however more vulnerable in times of crop failure. When the farmers became freeholders the incentive grew to produce surpluses that could be sold on the markets that were developing at the same time. As a result of this the country and the population were provided with a more even supply of grain. Increased efficiency led to the freeing of space for other production outside the agricultural sector.

Sweden's industrial development began in the middle of the 19th century. An increasing portion of the population left agriculture for industry. With this the demand for skilled labour increased in all areas. At the same time traditional professional skills lost importance because of the mechanised processes. Parallel with the development of industry was the growth of the service sector, among other things accompanied by significantly improved transport.

From the 1930s developments featured general electrification, the extension of the use of the automobile and the expansion of air travel. From the 1970s electronics has been in a state of explosive growth and this has made it possible to handle information in greater quantities. Production has thus become more knowledge intensive and the service sector has expanded.

Figure 1 Share of employment in agriculture, industry, construction and services 1880-1998



Source: Lennart Schön, A modern Swedish economic History (*En modern svensk ekonomisk historia, 2000, SNS förlag*)

The diagram above shows how the service sector's share of employment over the last thirty years has expanded, mostly at the cost of industry. Part of this transformation is however an optical illusion. Many services were previously performed inside industrial companies but in the course of the last decades an increasing share of services has moved out to new businesses.⁴⁰

⁴⁰ Schön, Lennart, A modern Swedish Economic History, p- 42; *En modern svensk ekonomisk historia, 2000, SNS förlag, Stockholm.*

The structure of commerce and industry and compliance costs

After the foregoing excursion into history we shall henceforth keep to a more limited time perspective. The shift in employment from industrial production to service production described above was also underway during the time that is relevant for this study, i.e. since the last survey was carried out in 1994. The table below shows that employment decreased in the industrial and construction sectors between 1993 and 2004 both in absolute and relative figures. The opposite is the case for the service sector i.e. employment increased during the same period both in absolute and relative figures.

Table 10 Number employed by branch of commerce and industry (SNI [Swedish industry codes] 1992 and SNI 2002 respectively)

	1993		2003	
	Share in thousands	Share	Share in thousands	Share
Agriculture, forestry and fishing	137	3%	89	2%
Manufacturing, mineral extraction and energy production	772	26%	723	23%
Construction	240		239	
Trade and communications	776		802	
Financial Intermediation, business services	383	71%	593	75%
Education and research ¹	317		516	
Health care and social work ¹	819		687	
Personal and cultural services, cleansing	286		338	
Public administration etc.	228		243	
Not available	6	0%	4	0%
Total	3,964	100%	4,234	100%

¹From 2003 the revised standard SNI 2002 is used, which entails inadequate comparability with previous years. Source Statistics Sweden

Employment is nevertheless not directly relevant to the magnitude of compliance costs. What is more interesting is whether the development entails that large industrial companies hive off small service businesses resulting in an increase in the number of small businesses.

Table 9 above shows the number of businesses in different branches of commerce and industry in 1993 and 2004 respectively. The trend in the industrial and service sectors respectively between these two years can not however be discerned due to altered business definitions. As an alternative the table below makes the following comparison between the years 1997 and 2004. It shows that the number of businesses in the industrial and construction sectors has increased by about 19,000 during the period of comparison. This increase is modest compared with that of the service sector which has increased by approximately 120,000 businesses.

Table 11 No. of businesses by branch of commerce and industry (SNI [Swedish industry codes] 1992 and SNI 2002)

	1997		2004	
	No. of businesses	Share	No. of businesses	Share
A-B Agriculture, hunting, forestry and fishing	161,652	20%	174,224	20%
C-E Industrial sector	50,919	13%	58,857	14%
F Construction	50,195		60,375	
G-I Trade and communications	171,990	51%	174,768	60%
J Financial Intermediation	4,612		6,454	
K Real estate, renting and business activities	150,021		216,949	
L Public administration and defence; compulsory social security	867		564	
M Education	6,692	16%	12,865	7%
N Health and social work, veterinary activities	14,828		23,778	
O Other community, social and personal service activities	51,066		84,579	
Other branch unknown	128,543		56,776	
Total	791,385	100%	870,189	100%

Source Statistics Sweden

We can thus establish that the trend in commerce and industry is such that the number of businesses in the service sector is increasing whereas the increase is much more modest in the industrial sector. An important cause of this is increased productivity in industry which means that resources are released for production of new services outside this sector. This trend together with the development of computer and information technology means that a large share of those services that were previously carried out within industrial firms can now be performed by smaller external service firms without loss of efficiency, so-called outsourcing.

5.3 Summary and conclusions drawn from the comparison

When compliance costs in the 1993 survey were compared with the corresponding costs in 2005 it was observed that they had increased in total by SEK 1.9 thousand million or by 42 per cent. Of this increase SEK 1.1 thousand million are explained by a volume increase i.e. there are a greater number of businesses in 2003 than there were in 1993, whereas SEK 0.8 thousand million may be explained by the increase in costs. The total cost increase among the smallest businesses was SEK 2.4 thousand million while the costs for all other businesses have instead gone down.

Three important factors behind the change in compliance costs since 1993 have been examined above. These are the change of the regulatory framework, the development of computer technology and the change in the structure of commerce and industry. The two first factors are significant for individual businesses and thus explain a large portion of the cost changes described above. The last factor has no relevance from a business perspective but is significant for total compliance costs and thereby the volume change described above.

Below the influence of one or more of the aforementioned factors on the change in compliance costs is examined '*ceteris paribus*' (other things being equal). This means that the influence of these factors is judged in isolation as if no other factors exerted any influence at the same time.

Change in costs - the significance of the regulatory framework and computer aids

The list of regulatory changes presented in section 5.2.1 illustrate that the demands surrounding the handling of VAT have been made considerably more complicated since the first survey was carried out in 1993. At the same time a number of computer software companies state unanimously that the standardised accounting and tax programs have to a large extent coped with this increased complexity. This together with the increase in general computer maturity means that the work of handling VAT in businesses has not increased in proportion to the increase in complexity of the regulatory framework. Many of the largest businesses that have resources to develop computer systems themselves have also been able to offset the increased complexity with the help of technology. The big change with regard to software from the user perspective is the price. According to the software companies it has become relatively cheaper to handle VAT with the aid of computer techniques. This has meant that it has become profitable for increasingly smaller businesses to abandon manual handling in favour of new technology. At the same time there is always a limit to the size of business below which increased complexity of the regulatory framework can not be reduced or eliminated with the help of technology. Below this threshold we find businesses for which it is not profitable to buy computers complete with programs or where time and knowledge are not sufficient for learning the use of new technical aids. For such businesses increased complexity has in a higher degree meant more burdensome VAT handling.

This reasoning may be summarised as follows:

- The regulatory framework has become more complicated over the last 15 years
 - Computer technology has to a large extent compensated for the increased complexity and has in a relative sense become cheaper
 - There is a lower threshold imposed by the size of business for when it is profitable to use technical aids for handling VAT
- ⇒ Compliance cost has increased for the smallest businesses whereas it has decreased for the large ones.

Volume change – the development of the structure of commerce and industry

Since 1993 the number of VAT registered businesses has increased by about 150,000. A natural consequence of this is that compliance costs have also increased. It can be interesting to go one step further and reflect on how the change in the structure of commerce and industry has influenced compliance costs.

Section 5.2.3 describes the development of the structure of commerce and industry both in a long term historical perspective and in a shorter one. What is clear is that the structure of commerce and industry is in constant transformation. In step with the production of food and other goods becoming more efficient resources are freed for other production. During the last decades an increasingly large share of employment has been transferred to service production. This trend has two main causes. The first is that when vitally essential production of food and other important goods is made more efficient it has been possible to use resources for production of services that perhaps are not of the same vitally important character. The other explanation is that a large portion of the services that previously were performed within the industrial sector to an increasingly greater extent are being performed in small businesses outside this sector i.e. in the services sector. In other words the trend is that sections within large industrial businesses are hived off to form small service businesses. The rapid development of the service sector is thus to some extent an optical illusion as the same production is still carried out as previously. The difference is that what was previously done in a small number of large businesses is now done in many small ones.

The trend outlined here means that compliance costs are going to increase. This is because the VAT accounting that previously was performed in a small number of large businesses will be performed by many small businesses that have, viewed relatively, higher compliance costs.

This reasoning may be summarised as follows.

- The trend in the structure of commerce and industry is towards an increasing number of small businesses
 - Compliance costs are, viewed relatively, highest among small businesses
- ⇒ The increase in compliance costs due to volume is amplified by the structural change.

Provided that the trend towards the emergence of many small businesses is economically rational and necessary the result described above means that the VAT system in some sense is a brake on the development of the economy. This should merit closer discussion both from the perspective of economic activity and from the viewpoint of the economy of the nation. To fulfil its mandate the Tax Board is dependent upon the taxation system being accepted by taxpayers. If it is perceived as being unnecessarily onerous it will make the task of the Tax Board more difficult. For the benefit of the economy it is important that there are as few economic

obstacles as possible. Unnecessarily high compliance costs do not constitute efficient use of resources and should therefore be reduced as much as possible. The results above lead to the conclusion that the VAT system should be adapted as much as possible to the development of the economy. It should primarily be a matter of making it easier for first of all small companies to keep VAT accounts and file VAT returns.

Other factors

Besides the factors examined above there is a large number of possible causes of the change in compliance costs since the 1993 survey. Two of them are examined in the following.

External consultants

The conclusion that technological development has made handling VAT cheaper despite more complicated rules for all businesses except the very smallest ones is based on the assumption that businesses handle VAT internally. Thus the argument does not include the possibility of transferring the work of handling VAT to an external consultant. Provided that the market for accounting consultants is functioning, the trend described above should favour all businesses, also those that pay an external consultant for handling VAT. The technology that is cheaper, viewed relatively, ought to have made it cheaper for the external consultants as well to handle VAT with lower prices as a result. This should also favour the very smallest businesses. One of the problems in this survey is the difficulty in comparing the costs between firms that handle VAT internally and externally. The problems consist in that the size of the costs to both categories builds on assumptions not only regarding the hourly cost of internal time, but also regarding how large a portion of the external costs is related to VAT. Thus it is not possible to say how the costs of handling VAT are affected by their being handled internally by the firm or by an external consultant. Nor is there any information about how the fees of accounting consultants have developed over time. In other words the significance of and costs for external accounting consultants is an unknown variable in the analysis. (See further 6.3)

Influence of initial costs

As was observed in section 5.2.1 certain significant changes in the structure of VAT took place shortly before the 1993 survey. These were changes that entailed costs of a temporary as well as of a permanent kind. The temporary costs should, however, according to the argument presented in that section, have disappeared later. At the same time possible temporary costs in the survey of 2005 should be considerably lower than they were in 1993. In other words, when comparing the results of the surveys of 1993 and 2005, the change in the temporary costs should have had the effect of slowing down the increase in compliance costs. Expressed in another way the difference between the two surveys would have been wider if the temporary costs had not existed.

An interesting question in this context is how the initial costs that prevailed at the time of the 1993 survey were distributed among different types of business. What is evident is that the initial costs were related to the reductions of certain tax rates. Not quite 8 per cent of businesses without employees work with more than one rate of VAT whereas 62 per cent of the very largest businesses do. In between, the share increases uninterruptedly with increasing size. This means that the temporary costs that were included in the compliance costs in the 1993 survey were present to a higher degree in the larger businesses than in the small. This also means that the increase in compliance costs affecting the smallest businesses has only to

a small degree been weakened by the diminishing initial costs whereas the initial costs to a greater extent have given impetus to the reduction of compliance costs affecting the large businesses.

The foregoing argument does not have much relevance for the conclusions previously drawn regarding the significance of the regulatory framework and computer aids. The results still show that the costs have increased for the smallest businesses while they have decreased for the large ones. It may be assumed that a certain part of the reduction for the large businesses however depends on the diminishing temporary costs. The most important implication of the argument in respect of temporary costs is instead that changes in the law result in costs and that low compliance costs presuppose rules that remain stable over time.

6 Factors influencing compliance costs

6.1 Size of business enterprise

Both international and national studies of compliance costs have shown that the single most important explanation to the magnitude of compliance costs is the size of the business enterprise. This result is also confirmed by this survey. In the survey we have had access to different indicators of size such as turnover, number of employees and number of invoices. Irrespective of which measure is used compliance costs rise with the size of the business. In table 12 below we see for example that the compliance costs in a business with 50 to 499 employees is SEK 20,000 higher than in a business without employees. That we have chosen to illustrate the correlation between business size and compliance costs by means of the number of employees is primarily because employees were the measure of size used in the 1993 survey. By using the same measure of size the comparability of the two surveys increases.

Table 12 compliance costs per business enterprise

No. of employees	No. of businesses	No. of employees	Total costs (millions)	Average/ business	Average /employee
0 employees	392,698	-	2,405	6,125	-
1-4 employees	121,894	233,315	1,729	14,182	7,409
5-9 employees	31,696	206,239	612	19,312	2,968
10-49 employees	26,150	504,010	621	23,760	1,233
50-499 employees	4,865	589,032	127	26,003	215
Total	577,303	1,532,596	5,494	9,516	3,585

Another correlation highlighted in several earlier surveys is that compliance costs are strongly regressive i.e. they hit small businesses harder than large ones. The tendency is clear in this survey too. In businesses with between 50 and 499 employees compliance costs are about SEK 200 per employee. For businesses with between 1 and 4 employees the cost per employee is close to 35 times as high or about SEK 7,500 per employee. As said, the results agree well with comparable surveys in other countries. A study from Holland showed for example that compliance costs were thirty times higher among small businesses than among large ones, see section 2.6

6.2 Branch of commerce and industry

As we have described in section 2.6 many international studies have made comparisons of compliance costs between different branches of commerce and industry. In those cases where differences have been observed the causes are that different business sectors face different rules. It is more rarely a question of the sector itself. An analysis of possible differences between sectors thus presumes that the regulatory framework governing the sector is taken into consideration. This section describes the result of a comparison between different sectors in the present study. As the data is not sufficiently large for the businesses to be divided both according to business sector and size of business the results are presented according to larger business sector groupings which have been judged to be homogeneous in respect of VAT. The table below shows the total compliance costs distributed by type of business. The largest compliance costs viewed totally are in the sectors included in the categories J and K which largely consist of businesses selling services to other businesses. Together these categories

also make up the largest group in this compilation comprising 20 per cent of all businesses. The next highest cost is in the grouping for trade. This grouping is also the next largest comprising 13 per cent of all businesses.

Table 13 Total compliance costs distributed by business sector; SEK million

Business sector	Total cost, m. SEK	Share of total cost	Share of no. of businesses
A-B Agriculture, forestry and fishing	687	11,0%	7,7%
C-E Mineral extraction, manufacturing and electricity, heating and water supply	690	11,0%	6,1%
F Construction	527	8,4%	6,4%
G Wholesale and retail trade	1,223	19,6%	12,5%
H Hotel and restaurant	291	4,7%	2,5%
I Transport	332	5,3%	3,2%
J-K Financial activity, real-estate management, business services etc.	1,314	21,0%	21,3%
L-N Public administration, education, health care	134	2,1%	2,4%
O-Other community, social and personal service activities	270	4,3%	6,6%
Subtotal business sector known	5,468	87,4%	68,7%
Subtotal business sector unknown	785	12,6%	31,3%
Of which			
Lack SNI code	26	0,4%	0,9%
Large business	269	4,3%	0,1%
Public authority	79	1,3%	0,1%
Lack telephone number	411	6,6%	30,2%
Totalt	6,253	100,0%	100,0%

The table below shows the average cost per business for various business sector groups and categories. In those cases where the statistical uncertainty is judged to be overly great the result for the category is marked with an asterisk. The highest average compliance cost is carried by the segments trade and communications. The industrial and construction sectors also have high costs. The lowest costs are in the groups real estate management and business services and agriculture and forestry. Low costs are also found in the group public administration, education, health services and other personal services. The latter group is however very heterogeneous from the viewpoint of VAT and for this reason is difficult to comment upon.

Table 14 Average compliance costs distributed by business sector and size of business, SEK

Business sector	0 employees	1-4 employees	5+ employees	Total
A-B Agriculture, hunting, forestry and fishing	6,554	17,745	41,076 *	8,560
C-E Industrial sector	6,572 *	11,992	26,341	12,178
F Construction	7,232 *	12,178	26,775	11,787
G-I Trade and communications	7,195	16,141	21,670	12,678
J-K Financial Intermediation Real estate management, business services	5,457	11,067	14,291	7,174
L-O Public administration, education, health services, other social and personal services	5,638	10,665 *	14,937 *	6,650
Lack SNI code	4,215 *	-	-	4,215 *
Grand Total with sector code	6,185	13,588	22,247	9,518
Large businesses	..	..	..	633,991
Public authorities	..	..	..	76,431
Lack telephone number	..	..	..	1,632

* The results should be used with care as the statistical uncertainty is judged to be great.

As in previous international studies a correlation is perceptible between the complexity in the regulatory framework governing the business sector and the compliance costs. Common to the three groups with the highest compliance costs is the fact that they all have to handle complicated VAT rules. The building industry has special rules for payment on account and for the final settlement of construction projects. Businesses in the industrial sector often conduct trade with other countries, within and outside the EU. The group trade and communications finally often handles several tax rates, which requires a more complex accounting system and entails demarcation problems.

The differences in average cost between different business sectors persist on the whole even when the figures for the size of business are held constant. There is however one exception. It is the trade sector which has distinctly lower costs in the largest business category (not less than 5 employees) than the industrial and construction sector. A possible cause is that the difficulties these two sectors face –EU and construction rules - cannot be reduced with the help of technology in the same way as differentiated tax rates. A corresponding difference is not present among the small businesses which do not have the same possibilities as the large ones to reduce manual handling by means of tailor-made computer systems.

This conclusion is supported by the interviews carried out with the very largest businesses within the scope of this study. The trading firms that were interviewed had considerably lower compliance costs than industrial firms. The former set aside considerably fewer resources than the latter for handling VAT. This was explained by the fact that trading firms had built up an efficient computer system for reporting and keeping accounts that did not require manual handling to a very great extent. Industrial firms stated indeed that they too had built up extensive systems but that the complex regulatory framework, not least in connection with trade with other countries, still to some extent requires manual checks, corrections and the use of judgement.

6.3 Manner of filing tax returns

That compliance costs increase the more often businesses have to file a tax return goes almost without saying. This is also confirmed by the survey where compliance costs to businesses filing a tax return every month for VAT and PAYE are about SEK 8,000 higher than to businesses that report once a year in the annual income tax return.

Table 15 Compliance costs depending on manner of filing VAT returns

Manner of filing return	Cost per business
Every month with VAT and PAYE return	12,284
Once annually with income tax return	4,295
Once annually with VAT return	4,091
Don't know/no answer	-
Total	9,518

The big difference may partly be explained by the fact that the share of large businesses is greater among businesses that file a return once monthly than businesses that file a return once annually. But even if we hold the size constant compliance costs are higher for businesses that file returns once monthly. For businesses with a turnover up to SEK one million per year the cost is fully SEK 3,000 higher for businesses filing returns once monthly compared with businesses that file a return once annually.

Filing returns via the Internet

Seven per cent of businesses included in the survey stated that they file their tax returns via the Internet. Among businesses filing returns once monthly 9 per cent state that they file via the Internet. The average cost for businesses that file via the Internet is about SEK 1,300 higher than for businesses that do not. This difference is not statistically significant and for this reason some care should be taken when interpreting the result. The same applies to cost per employee which is on average SEK 1,900 higher for businesses filing via the Internet.

Table 16 Compliance costs depending on filing via Internet

File return via Internet	Cost per business
yes	11,335
no	10,043
Don't know/no answer	-
Total	9,518

When we investigate other background causes of the difference in cost between businesses that file VAT returns via the Internet and businesses that do not we find only one notable difference. Businesses that stated that they file returns via the Internet reported more often that they have a computerised accounting system which simplifies the preparation of a VAT return; 62 per cent compared with 40 per cent for businesses not filing returns via the Internet.

We established in section 6.4 that a probable reason why businesses with computerised accounting systems have higher compliance costs than others is that their handling of VAT is more complex. The same reasoning could be transferred to businesses that file returns via the Internet. Such businesses have computerised accounting systems to a greater extent and probably VAT accounting on a larger scale.

It should be noted that the number of businesses filing returns via the Internet according to the Tax Board's own statistics are 5.5 per cent of all businesses.⁴¹ The number of businesses that file returns via the Internet is therefore somewhat overrepresented in this survey.

Internal or external assistance

In the survey we ask the question whether businesses handle VAT internally or partly or wholly rely on external assistance. It emerges that 50 per cent of all businesses handle VAT wholly internally whereas 45 per cent of businesses wholly or partly rely on external assistance. The table below shows that the large businesses handle VAT internally to a greater extent. Among businesses with between 50 and 499 employees 87 per cent handle VAT internally. The survey also shows that businesses with a computerised accounting system that simplifies the preparation of the VAT return handle VAT internally to a greater extent than others.

Table 17 Share of businesses using external assistance 1993 and 2005, per cent

No. of employees	0		1-4		5-9		10-49		50-499	
	1993	2005	1993	2005	1993	2005	1993	2005	1993	2005
Handle VAT internally within the business	-	50	-	45	74	55	88	72	94	87
Relied on external assistance (partly or wholly)	-	45	-	52	26	41	12	25	5	9
Don't know/no answer	-	6	-	3	-	4	-	3	1	4
Total	-	100	-	100	100	100	100	100	100	100

If we compare the 2005 result with the 1993 survey it is evident that the number of businesses relying on external assistance has increased for businesses with between 5 and 499 employees.⁴² The largest increase is among businesses with between 5 and 9 employees where 41 per cent of businesses state that they rely on external assistance today compared to 26 per cent in 1993. Correspondingly the number of businesses that handle VAT entirely internally has fallen since 1993.

A question that arises in this context is whether businesses relying on external assistance pay more or less than those businesses that choose to handle VAT internally. Table 18 below contains figures for what businesses in different turnover intervals pay on average for internal and external assistance respectively. According to this table the businesses that handle VAT entirely internally have the lowest costs for handling VAT. Businesses that both handle VAT internally and rely on external assistance have the highest costs.

⁴¹ The figure is based on the number of businesses that filed VAT and PAYE returns via the Internet in December 2005.

⁴² Businesses with between 0 and 4 employees were not included in the postal survey sample in 1993

Table 18 Average cost for handling VAT

Handle VAT accounting	Turnover					
	0-999,999 SEK	1 million – 9,999,999 SEK	10 million- 39,999,999 SEK	40 million SEK or more	Don't know/ no answer	Total
Entirely internally within the business	3,878	11,385	13,821	10,293	10,293	7,214
Entirely externally	5,850	15,368	31,770	32,905	3,728	9,770
Both internally and externally	8,131	22,715	56,905	102,284	11,930	15,789
Don't know/no answer	2,858	7,125	5,026	11,734	0	3,778
Total	5,253	15,033	21,566	16,856	10,575	9,518

These figures must however be interpreted cautiously. The costs for external assistance are based on what businesses stated that they pay for external assistance. In those cases where businesses also relied on external assistance for day-to-day bookkeeping and year-end procedures we have assumed that the 'VAT component' corresponds to one third of the total costs. This assumption implies a rough estimate. The share of VAT handling in the total costs for external assistance can vary greatly between businesses. We have also had to estimate the internal costs. As was mentioned in the introductory section we have assumed that one hour of internal time corresponds to a total salary cost of SEK 229 per hour. We believe that this is minimum estimate and for this reason it is likely that the internal costs are in fact higher.

On the basis of the, to some extent imprecise estimates, of internal and external costs it is impossible to say that internal handling of VAT is cheaper and thereby more advantageous than relying on external assistance. What is more probable is that every business judges whether it is worthwhile for the enterprise to rely on external assistance or not. To this should be also added the psychological aspect of compliance costs. Many business owners may experience handling VAT as a burden and as something they are prepared to pay to be rid of. The psychological cost is difficult to measure but must be present in an evaluation of internal and external costs.

6.4 Computerised accounting systems

Computerised accounting system in businesses 1993 and 2005

Over the last twenty to thirty years extensive computerisation has taken place in our society. In the 1970s it was only the largest businesses that used computers for administrative work. Today computer maturity and the price level of hard- and software are such that the use of computerised accounting systems is profitable also for very small businesses.

In the 2005 postal survey the same question was asked about computerised accounting systems as in the survey carried out in 1993. The table below presents the results.

Table 19 Result of question: 'Does your business have a computerised accounting system that simplifies the preparation of VAT returns? ', in the surveys of 1993 and 2005

Computerised accounting system	No. of employees									
	0		1-4		5-9		10-49		50-499	
	1993	2005	1993	2005	1993	2005	1993	2005	1993	2005
Yes	-	24	-	38	70	56	83	43	91	46
No	-	41	-	28	30	10	17	13	8	13
Don't know/ no answer	-	36	-	34	1	33	-	43	1	42
Total	-	100	-	100	100	100	100	100	100	100

In the survey of 1993 questionnaires were sent only to businesses with at least 5 employees. Only these can be the subject of a comparison. On quick observation the results may appear to be puzzling. In those cases capable of comparison between the two years the proportion of yes-answers is considerably greater in 1993 than in 2005. At the same time the proportion that did not answer, or could not answer, was very much greater in 2005 than in 1993. The reason why so many had difficulty in answering the question in 2005 is not quite easy to see. A possible reason may be the generally higher level of computerisation in today's society combined with the phrasing of the question. Computers are considerably more common in today's society, both at work-places and at home, than they were in 1993. This means in turn that there has been a general increase in computer maturity. The person that is confronted with the question: 'Does your business have a computerised accounting system that simplifies the preparation of VAT returns?' perhaps, therefore, in another way than was the case in 1993 makes a decision about the inherent condition that is in fact contained in the question i.e. that is not only a matter of a computerised accounting system – it should simplify preparing the VAT return as well. In 1993 people perhaps assumed in another way that a computerised accounting system actually simplified the work. In today's society we take computers for granted and have no practical experience of manual accounting. The advantages of computerisation are therefore unclear, which makes the question hard to answer for the person who has to make up his or her mind about the question in its actual wording.

The accounting system's influence on compliance costs

The table below shows the average respective cost for businesses with and without computerised accounting systems distributed by size. In all three size categories the average cost is higher for businesses with a computerised accounting system than for those without one.

Table 20 Average respective cost to businesses with and without computerised accounting system distributed by size

Computerised accounting system	No. of employees				
	0	1-4	5-	Don't know	All
Yes	6,967	12,181	24,148	19,800	12,656
No	5,290	10,798	22,415	-	7,517
Don't know/no answer	5,430	11,193	17,318	21,567	9,086
Total	5,761	11,446	21,509	21,318	9,753

The interpretation of the results above depends on whether the businesses in the two categories –having a computerised accounting system or not- are homogeneous or not.

If the businesses in the two categories were alike in all respects except with regard to having a computerised accounting system or not then the results above would be contrary to the ideas that generally prevail regarding the effects of computerisation. The result would in fact indicate that computerised accounting systems make handling VAT more costly. This interpretation does not however observe the qualification that is actually in the question the respondents have answered i.e. that the system 'simplifies the preparation of VAT returns'. If it were not so that the system simplified VAT handling the respondent would have answered the question with 'no' even if the businesses did have a computerised accounting system. The costs for the 'no' category would thus have been higher than for the 'yes' category.

The explanation must therefore be that the businesses are not homogeneous and that the differences lie *inter alia* in how complicated their VAT handling is. There is much to support the argument that the result shows that it is businesses with more complex VAT handling that acquire computerised accounting systems. Their relatively high cost would have been even higher without the computerised system. For businesses faced with an easier VAT situation there is on the other hand no economic advantage in acquiring a computerised system.

7 The significance of the number of rates of VAT for the magnitude of compliance costs

In this section we investigate the correlation between the costs to businesses of handling VAT and the number of rates of VAT. Viewing the population of businesses as a whole, the cost of handling VAT increases when a business handles more than one rate of VAT. The cost per business increases both between one and two and between two and at least three VAT rates. On average the difference between handling one or two VAT rates is SEK 2,390 and between two and at least three SEK 5,846 respectively. The difference between businesses that only handle one VAT rate and those that handle three or more Vat rates is on average SEK 8,236 per business.

Table 21 Cost of handling VAT distributed by number of VAT rates - 1

No. of VAT rates	Cost/business	No. of businesses (%)
1	8,686	78%
2	11,076	17%
At least 3	16,922	5%
Total	9,518	100

In table 21 above we have included all rates of VAT i.e. also 0 per cent VAT. If we instead look at those businesses handling the VAT rates of 6, 12 and 25 per cent the differences are even greater. The difference between handling one or two VAT rates is in this case SEK 2,710 and between two and three SEK 6,715. The difference between the businesses that have to handle only one VAT rate and those that handle three VAT rates are on average SEK 9,425 per business, see table 22 below.

Table 22 Cost of handling VAT distributed by number of VAT rates - 2

No. of VAT rates	Cost/business	No. of businesses (%)
1	8,753	82%
2	11,463	14%
3	18,178	4%
Total	9,518	100%

Before we draw the conclusion that the number of VAT rates influences the compliance costs of businesses we must check whether there are other factors that may underlie this correlation. In the following we shall investigate how the relationship between the cost of handling VAT and the number of rates of VAT are affected by holding constant the size of business, the number of years the business has been active, whether the business uses a computerised accounting system or not and what is the significance of whether the business handles VAT internally or externally.

Size of business

The explanation of why compliance costs rise with increased number of VAT rates could be that a relatively greater number of large businesses handles several VAT rates. By holding the size of business constant we may investigate whether the correlation between VAT rates and compliance costs is independent of the size of business. In the table below we have divided the businesses by number of VAT rates and number of employees. The costs of handling VAT rise with increased number of VAT rates irrespective of number of employees. The largest difference in SEK is found among businesses with more than five employees. The difference between handling three or five VAT rates is roughly SEK 8,000 for these businesses. The additional cost of handling three instead of one VAT rate counted as a percentage is nevertheless largest among businesses with between one and four employees, about 54 per cent.

Table 23 Cost of handling VAT distributed by number of VAT rates and number of employees.

No. of employees	No. of VAT rates	Cost/business
0 employees	1	6,045
	2	6,573
	At least 3	7,646
	Total	6,185
1-4 employees	1	12,599
	2	16,075
	At least 3	19,412
	Total	13,592
5-employees	1	19,296
	2	28,505
	At least 3	27,124
	Total	22,247
Total	1	8,686
	2	11,076
	At least 3	16,922
	Total	9,518

The correlation between the cost and the number of VAT rates is not affected by the choice of size-variable used. The cost of handling VAT rises with increased number of VAT rates also when we hold the turnover constant.

It is thus evident that the size of the business does not explain the correlation between the VAT handling costs of businesses and the number of VAT rates. The correlation persists also when we hold size constant.

Number of years business has been active.

We have observed that there is a true correlation between compliance costs and the number of VAT rates to be handled by the business. A question that follows is whether businesses can take any measures to reduce the increase in costs entailed by handling several VAT rates. We could for example imagine that businesses that have been active for a lengthy period of time could have rationalised their handling of the VAT rates and thereby reduced the increase in

costs entailed by several rates i.e. that there has been a learning effect. One way of testing this hypothesis is to investigate whether compliance costs increase with the number of VAT rates also in businesses that have conducted their activities for a number of years. We ascertain however that the costs of handling VAT in businesses that have been active for more than three years increases the larger the number of VAT rates the business handles. The difference between handling one or three VAT rates is on average SEK 10,034. The result shows that there does not seem to be any direct learning effect when it comes to handling several VAT rates. If we look instead at businesses that have been active for less than three years we do not see on the other hand any correlation between the cost of handling VAT and the number of VAT rates handled by the business. An explanation could be that most businesses have not yet had time to establish routine methods of handling VAT. It is not until businesses have been active for a long time that routines begin to become stable and differences regarding the number of VAT rates become noticeable. In the sample however the number of businesses with two or three VAT rates and that have been active for more than three years is too small to permit us to draw any certain conclusions.

Table 24 Cost of handling VAT distributed by number of VAT rates and number of years business has been active

No. of years active	No.of VAT rates	Cost/business
0-3 years	1	7,052
	2	6,191
	At least 3	6,744
	Total	6,915
More than 3 years	1	9,192
	2	12,314
	At least 3	19,226
	Total	10,288
Don't know/no answer	1	23,699
	2	8,244
	Total	10,092
Total	1	8,686
	2	11,076
	At least 3	16,922
	Total	9,518

Presence of computerised accounting system

Another factor that could reduce the cost of handling several VAT rates is whether the business uses a computerised accounting system when preparing its VAT return. This hypothesis is not supported by the results either. Both in businesses that use and do not use a computerised accounting system the cost of handling VAT rises in step with the increase in the number of VAT rates the business works with. The difference between handling one VAT rate and three VAT rates is SEK 10,922 for businesses that answered that they had a computerised accounting system and SEK 4,826 for businesses that answered that they did not. (It even holds that measured as a percentage i.e. in proportion to the cost of handling one VAT rate, businesses answering that they use a computerised accounting system have a higher cost). That the difference is greater for businesses with a computerised accounting

system may partly be explained by there being more large businesses in this group compared to the group lacking computerised accounting systems. Another explanation may be that it is primarily businesses with the most complicated accounting that choose to invest in computer aids.

Table 25 Cost of handling VAT distributed by number of VAT rates and presence of a computerised accounting system

Have computerised accounting system	No. of VAT rates	Cost/business
Yes	1	11,189
	2	14,276
	At least 3	22,422
	Total	12,359
No	1	6,865
	2	8,009
	At least 3	11,535
	Total	7,271
Don't know/no answer	1	8,066
	2	10,728
	At least 3	15,918
	Total	8,941
Total	1	8,686
	2	11,076
	At least 3	16,922
	Total	9,518

Internal or external VAT handling.

One could imagine that external handling of VAT would make it so efficient that the significance of several VAT rates would lessen. An analysis of the results shows however that this is not so. Irrespective of whether businesses handle VAT only internally, only externally or both internally and externally the costs of handling VAT increase as the number of VAT rates increases. We observe the greatest difference measured as a percentage, among businesses that handle VAT internally. In these businesses the difference between handling three instead of one VAT rate is fully 100 per cent (SEK6,806). In absolute figures the difference is however greater in businesses where VAT is handled both internally and with external assistance. As a general rule businesses with both external and internal accounting have nevertheless higher costs than other businesses, which could explain part of the large difference in absolute figures. The cost to these businesses for handling VAT is SEK 17,101 on average which may be compared to SEK 7,280 and SEK 9,809 respectively for businesses that manage their accounting entirely internally or entirely externally.

Table 26 Cost of handling VAT distributed by number of VAT rates and if VAT handling is managed internally or externally

Type of VAT handling	No. of VAT rates	Cost/business
entirely internally	1	6,576
	2	8,462
	At least 3	13,526
	Total	7,214
entirely externally	1	8,935
	2	11,775
	At least 3	16,199
	Total	9,769
Both internally and externally	1	14,670
	2	17,143
	At least 3	24,443
	Total	15,789
Don't know/no answer	1	3,205
	2	6,306
	At least 3	4,542
	Total	3,778
Total	1	8,686
	2	11,076
	At least 3	16,922
	Total	9,518

What is the price of several VAT rates being handled?

As we have been able to observe above compliance costs rise with an increase in the number of VAT rates. The question is what the cost of handling more than one VAT rate amounts to totally. In table 27 we have attempted to work out the total 'extra cost' to businesses of more than one VAT rate being handled. By starting with the average cost to businesses with one, two or three VAT rates we get the total cost as it appears today. We have then instead calculated a total cost that is based on the assumption that all businesses have only one VAT rate. The difference between the total cost today and the computed total cost that presupposes that all businesses have only one VAT rate is just under SEK 480 million. This extra cost is approximately 9 per cent of the total compliance costs and 30 per cent of costs for businesses with more than one VAT rate. Expressed in another way compliance costs for VAT would go down by on average 30 per cent in businesses with more than one VAT rate if a uniform VAT rate were to be introduced.

Table 27 Cost of handling several VAT rates⁴³

No. of VAT rates	Average cost	No. of businesses	Cost today	Total cost with VAT rate	Saving (millionSEK)
1	8,686	449,598	3,905	3,905	-
2	11,076	97,450	1,079	846	233
At least 3	16,922	29,987	507	260	247
Total	9,518	577,034	5,492	5,012	480

Earlier in this section we showed the difference in average cost if we only consider the handling of the VAT rates 6, 12 and 25 per cent. The total saving from introducing a uniform VAT rate would in this case be fully SEK 440 million. If businesses not included in the sample are considered then a further SEK ten million may be added.

To the computed cost may be added additional costs to businesses that do not report more than one VAT rate but still have relatively more complex VAT handling merely due to the existence of several VAT rates. All firms have to decide how the regulatory framework is to be applied to the business they are running and have to adapt their routines and systems to it. If such a decision is to be based on judging a complicated system it will be more difficult and more costly. Because a differentiated structure of VAT rates complicates the regulatory framework our argument is that it entails a cost increase for more businesses than only those that are handling more than one VAT rate. The magnitude of this cost increase is difficult to estimate. The total cost of a differentiated structure of VAT rates may however be estimated to be at least SEK 500 million.

⁴³ It may be pointed out that table 27 above assumes that the difference in cost between businesses with different VAT rates depends exclusively on several VAT rates being handled. We can however not exclude that other factors may also explain part of the difference.

8 The effect of VAT on liquidity

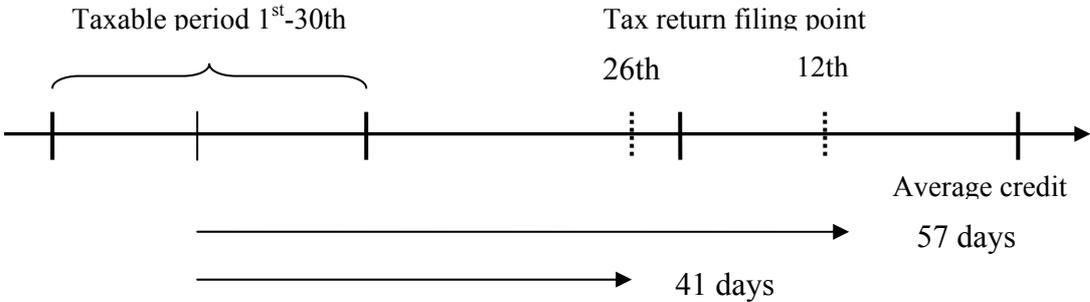
8.1 Time lag between tax period and payment period

As has already been said in the introduction to this report VAT is an indirect tax which means that it is carried by the final consumer but is charged to and paid over by the producer or the seller. Businesses may therefore be regarded as the government's tax-collectors for VAT. When VAT was introduced businesses were given a generous credit for payment of the tax. The express purpose of this was to provide them with compensation for collecting the tax on behalf of the government. With the introduction of individual clearing accounts for taxes in 1996 the taxable period was reduced from two months to one month. At the same time the time limit for payment was curtailed significantly.

Section 2.3 above described circumstances that may result in the tax system having positive effects for tax payers. Such a situation is when there is a delay between the points in time of tax assessment and of payment. The VAT that the business adds on to the price of its sales, output VAT is money that may be used by the business itself until it is to be paid to the state. The further ahead the point in time is for filing a VAT return the greater is the value of the credit afforded the business. The VAT that the business itself pays on its purchases, input VAT, means on the other hand the reverse for the business, i.e. it has to have money owing to it until a refund is made. Normally this happens when the business files its tax return and thus offsets its claim for input VAT against the output VAT that is to be paid in. If the input VAT is greater than the output VAT the business will, however, get the surplus amount paid back.

It should be pointed out that compensation in the form of credit has no significance to compliance costs as such. As described in section 2.3 compensation in the form of credit is only a shift of interest revenue between the state and businesses. Compliance cost viewed as an operating cost of the VAT system is thus unaffected by this.

The first arrow in the diagram below illustrates the period of credit that small businesses that normally file a VAT return on the 12th of the second month after the taxable period are awarded when net VAT is positive. The average time for this is 57 days. Large businesses with an average turnover above SEK 40 million pay their VAT on the 26th of the month after the taxable period. This means that such businesses are awarded a shorter period of credit than the small ones, about 41 days.



When net VAT is negative the reverse applies, i.e. the business has a claim on the state which instead is the one being given credit. According to the VAT Act the Tax Board must in such cases swiftly refund the negative VAT to the businesses. Nor is there any reason why businesses may not file their VAT return before the prescribed time limit for filing the tax return.

8.1.1 Businesses that report VAT in their monthly tax return

The table below shows the total VAT collection and actual average credit period per month for different size categories in 2004.⁴⁴ The credit period was a little shorter in each size category in those cases where businesses had VAT to recover compared to where they had VAT to pay. It is also worth mentioning that the larger the businesses were the more quickly they had their VAT claim refunded. In other words it appears that awareness of liquidity in businesses improves with greater size.

Table 28 Total VAT collection and average credit period in days per month divided by size.

	To pay		To reclaim		net	
	Total VAT collection thousand million SEK	average credit period	Total VAT collection thousand million SEK	average credit period	Total VAT collection thousand million SEK	average credit period
-1m. SEK	7,2	59,4	5,1	58,2	2,1	58,9
1m. SEK-10m. SEK	40,4	59,4	6,1	57,8	34,3	59,0
10m. SEK-40m. SEK	41,0	58,7	4,9	55,5	36,0	58,0
40m. SEK-	212,0	47,7	98,2	44,6	113,8	46,8
Total	300,5	58,9	114,3	57,5	186,2	58,4

Source: National Tax Board, own computation of data from statistical data base GIN-skatt

The value of the compensation businesses receive through credit corresponds to the interest businesses would have had to pay if they had borrowed the same amount. The table below shows a calculation of this interest⁴⁵ The first column shows total calculated interest, number of businesses and average interest per business that paid a net sum of VAT in 2004. In the following column the same thing is shown for businesses that received a net refund of VAT in 2004. The last column shows net figures for all businesses.

⁴⁴ The calculations are based on data on tax returns and payment periods from the Tax Board's VAT system

⁴⁵ The calculation is based on every individual basic decision for filing tax returns in 2004. The credit period is calculated from the number of days that passed from the middle of the taxable month to the actual month in which payment fell due and the actual sum that was payable or recoverable that particular month. In other words the calculation is done as if all businesses were paid in cash by customers and sales were spread evenly over the month. An interest rate of 5 per cent has been used for the calculations.

Table 29 Calculated interest on VAT credit

	Vat to pay			Vat to reclaim			Net VAT		
	Total interest m. SEK	No of bus- inesses	Average interest	Total Interest m. SEK	No of bus- inesses	Average interest	Total Interest m. SEK	No of bus- inesses	Average interest
-1m. SEK	58	136,302	428	39	85,016	464	19	221,318	85
1m. SEK-10m SEK	331	122,850	2,696	43	18,037	2,405	288	140,887	2,043
10m. SEK-40m. SEK	331	24,147	13,723	34	3,195	10,590	298	27,342	10,882
40m. SEK-	1,270	9,647	131,698	500	2,655	188,482	770	12,302	62,597
Total	1,991	292, 946	6,798	617	108,903	5,667	1,374	401,849	3,420

The smallest businesses paying a net sum received by this way of reckoning an average compensation of SEK 428, whereas the very largest received SEK 131,698. The problem in this context is businesses that received a greater sum in net refund than they paid. In principle they receive no interest compensation at all. On the contrary they are obliged to be in a situation in which the state owes them money. The interest calculated on these outlays is shown in the second column. For the smallest and largest size categories this interest exceeds the revenue interest. The net interest is however positive for each size category. This is because the number of businesses paying VAT in each group is considerably greater than the number reclaiming VAT.

8.1.2 Businesses that report VAT in their annual income tax return

For most of these businesses filing VAT returns happens only on one occasion. This is when the general income tax return is submitted the year after the income year. These businesses liable for tax must nevertheless also pay VAT monthly in the form of F-tax (preliminary tax on business activity of enterprises and self-employed persons). In theory there is also a certain amount of credit for these businesses too but shorter than for businesses that file a monthly VAT and PAYE return. Because F-tax must be paid on the 12th of the month after the month of taxable activity the credit period is on average about 27 days. $(30/2+12)$.

In the income year 2004 total net VAT reported in annual income tax returns was SEK 5,654 million. Assuming 27 days average credit and interest of 5 per cent total net credit may be calculated to be SEK 20.9 million $(5,654 \times 27/365 \times 5 \text{ per cent})$. For the approximately 375,000 businesses reporting VAT in the income tax return this means on average an interest of SEK 56.

This calculation is very much of an approximation. It assumes that the total VAT amount is evenly distributed over the twelve months of the year and also that all VAT, both VAT that is to be paid and to be reclaimed, is included in the calculation of monthly preliminary tax.

8.1.3 Total interest effect

The calculations are summarised in the table below. The conclusions are the same as in the international surveys described in section 2.3. The smallest businesses receive on average also the lowest interest compensation. In itself this is not sensational but a natural consequence of interest being related to the absolute magnitude of the added value produced in businesses. What is interesting however is when compensation in the form of interest is compared with the businesses' costs of handling VAT. It was established previously that VAT compliance costs are regressive, i.e. VAT is viewed as a relatively heavier burden on small businesses than on the large ones. The summary below shows that compensation in the form of interest

on credit almost strengthens this regressiveness. The interest covers an extremely small part of the costs of the smallest businesses whereas it represents quite a favourable compensation for many of the large ones. For some it can even exceed the costs.

Table 30 No. of businesses, total net interest, average net interest and compliance cost.

Category	No. of busin- esses	Total net interest m. SEK	Average net interest, SEK	Average compliance cost*
Income tax return	374,543	20,9	56	4,295
VAT return -1m. SEK	221,318	18,9	85	5,970
1m. SEK -10m. SEK	140,887	287,8	2,043	15,025
10m. SEK -40m. SEK	27,342	297,5	10,882	21,608
40m. SEK -	12,302	770,1	62,597	50,000**
Total	776,392	1,395,2	1,797	9,516

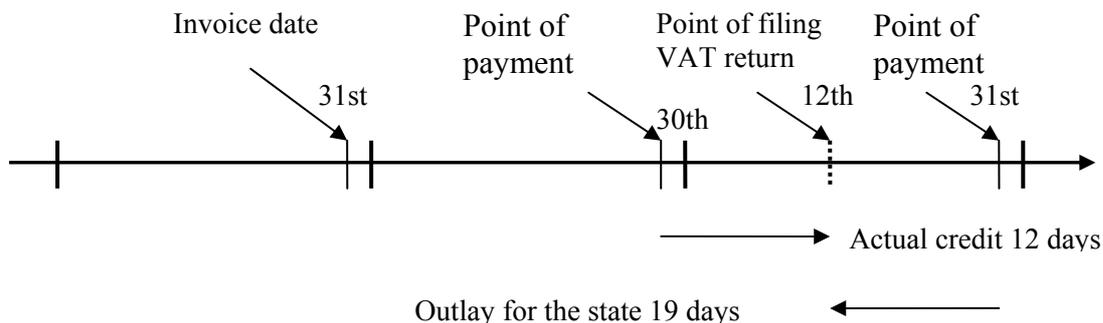
*Refers only to businesses included in the postal survey. This means that costs for businesses without a telephone number and public authorities are not included. For businesses with more than 499 employees see below.

**The cost is calculated on the basis of an approximate weighing together of costs to the businesses included in the postal survey with a turnover of over SEK 40 million and the businesses with more than 499 employees whose costs were determined by interviews.

8.2 Businesses' credit to customers

The calculations above of businesses' periods of credit start from the moment when tax liability begins i.e. when sales are considered to have taken place according to the VAT Act. This means that the calculations have been done irrespective of the actual cash flows of payments.⁴⁶ If consideration is given to when payment actually takes place then the actual periods of credit for many businesses become much shorter than in the calculations above. Assume that a business invoices a customer on the 31st and gives 30 days credit. If this customer pays at the right time the seller gets an actual period of credit of 12 days before VAT payment.

⁴⁶ This applies to all businesses filing a VAT return using the invoicing method, which means that tax liability begins when a sale has taken place i.e. most frequently on delivery of the goods. This method is obligatory for all businesses that have a turnover above 20 base amounts (as defined in the National Insurance Act). For 2004 this corresponded to a turnover of SEK 786,000. The alternative to the invoicing method is the accounts closure method which means that VAT during the current year is not reported until payment is made. The accounts closure method was employed in 2004 by 133,000 businesses.



Since tax liability for most businesses is independent of payment a small business should never give customers credit for longer than 42 days so that it never happens that the business will have to pay VAT to the state before they themselves have received payment from the customer.

The other example in the figure above shows that a business that invoices a customer on the 31st of a month and gives 60 days credit has a VAT outlay to the state lasting 19 days. To form a conception of how the giving of periods of credit functions in practice the Tax Board asked a number of questions in the postal survey that take this up. The results are given in the next section.

The table below shows that 40 per cent of all businesses at some time during the latest financial year had had to pay in VAT before they themselves had received payment from their customer. A further five per cent of businesses can not answer whether it has happened at all.

Table 31 Share of all businesses that at some time during the latest financial year have had to pay VAT before receiving payment themselves from customer

Has it ever happened during the latest financial year that your business has had to pay VAT before you yourselves were paid by your customer?	Share
Yes	40%
No	55%
Don't know	5%
Total	100%

For many businesses the situation arises that the customer can not pay an invoice in time because they have liquidity problems themselves. This is a risk that exists in all business enterprise. Any intention to adapt the VAT system to such occasional deviations from normal payment patterns does not exist. What is more serious is if there occur more systematic deviations from normal payment patterns that were assumed to be fundamental when the VAT system was created.

In recent years the Swedish Federation of Private Enterprises (Företagarnas Riksorganisation) *inter alia* presented reports in which it is maintained that many small businesses are facing increasing liquidity problems because they must pay VAT much sooner than they themselves are paid. This is because many large businesses are tending to delay the payment of invoices for increasingly longer periods. The Federation of Private Enterprise states that the VAT

system presupposes a normal payment delay of 30 days whereas large businesses are inclined to wait 60 days before paying at the same time making reference to international practice.⁴⁷

To form a conception of the magnitude of this tentative problem the postal survey asked a number of questions following on from the introductory one. The first follow-on question was about for how large a portion of sales VAT had to be paid to the state before the business itself had been paid. The second follow-on question concerned which causes the respondent believed lay behind the late payments. The choices given were

- that the customer ignored their payment terms
- that extended payment terms were required by the customer
- that the customer had its own liquidity problems
- other reason/ don't know.

The two first alternative questions are intended to capture those businesses that are in a relationship of such dependence upon the customer that they are forced to accept their unfavourable situation. This kind of situation can exist for example where a small sub-supplier to a large company has to choose between being owed money for a long period or seeing a large and important customer turn to a competitor. The first two alternatives have been summarised in the table below under the caption that the customer is utilising a position of power. Other reasons are reported separately. As the businesses in the postal survey could give more than one alternative the results in the table are divided into three categories. The third category comprises those who have referred to a combination of the two main reasons.

Table 32 Reasons why VAT had to be paid before the customer paid, divided by how large part of turnover was affected

Explanation of outlay:	On how large a part of sales did you need to pay VAT before you yourself received payment from your customer?						Total
	Very small part	Small part	To some extent	Quite a large part	Very large part	Don't know/no answer	
Wholly due to customer exploiting position of power	7%	8%	8%	3%	1%	1%	28%
Partly due to customer exploiting position of power	1%	4%	5%	2%	1%	0%	15%
Wholly for other reasons e.g. customer's own liquidity problems	18%	18%	13%	5%	3%	1%	57%
Total	26%	30%	26%	10%	6%	2%	100%

⁴⁷ Företagarnas Riksorganisation (the Swedish Federation of Private Enterprises), The Power Rebate: Small businesses borrow from their private funds to solve liquidity problems. (Maktrabatten: *Småföretagarna lånar från sin privata ekonomi för att klara likviditeten*, December 2003).

The table shows that of the businesses that stated that they at some time had had to pay VAT before they themselves had received payment 57 per cent answer that customers' liquidity problems lay entirely behind the situation that had arisen. For the remaining 43 per cent it is thus wholly or partly the power exploited by the customer that is the cause of the problem. For 20 per cent the problem is not of insignificant magnitude (the part of the table marked grey). For 7 per cent of the businesses the problem is quite big or very big (the dark grey area of the table).

Altogether about 17 per cent of businesses had at some time during their latest financial year been obliged to pay VAT before they themselves were paid by their customer wholly or partly because the customer exploited a position of power. For about 8 per cent of these the problem is not insignificant ('to some extent' or a greater part of sales). For three percent this affects quite a large part or a very large part of sales. It may be added that a position of power may also be the cause underlying the alternative that the problem is because the customer has liquidity problems.

Table 33 Reasons why VAT had to be paid before the customer paid, divided by total number of VAT-liable businesses

Cause of problem	Magnitude of problem			Total
	Problem does not exist or is unknown	Unknown or of insignificant magnitude	Not of insignificant magnitude	
Problem does not exist or is unknown	60%	..	..	60%
Wholly or partly due to customer exploiting position of power	..	9%	8%	17%
Wholly for other reasons e.g. customer's own liquidity problems	..	14%	8%	23%
Total	60%	23%	16%	100%

If the Tax Board is to fulfil its mandate in a reasonable way the tax system must be accepted by the general public and by businesses. If this acceptance is not present among large groups of tax payers then the Tax Board cannot collect the tax that has been determined in accordance with democratic procedures. An important and necessary condition for the acceptance of the tax system by the public is that it is adapted to the situation of the tax payer. For instance, there must be reasonable possibilities for tax payers to deliver the tax they have a duty to pay.

According to information *inter alia* in the aforementioned report by the Federation of Private Enterprises certain businesses are tending to demand longer and longer periods of credit from their suppliers, among other things with reference to what is generally valid internationally. This study has not investigated how strong this tentative trend may be. The result above does however point to the question whether the VAT system is adapted to the credit periods that certain small businesses are confronted with.

Whether it is the VAT rules that are to be adapted to the behaviour of certain powerful companies or whether it is more reasonable that the business sector collectively takes a concerted hold of the problem is a large and difficult question. Nevertheless the general principle should obtain that the tax system must be adapted to customs that prevail in the business sector. If it is so that the internationalisation of business also entails changed practices then it is reasonable that the tax system be adapted accordingly. For this reason there are grounds for casting light on this issue in a separate study.

9 Turnover threshold – the effects on compliance costs and tax revenues

This report describes how compliance costs are a heavier burden for small businesses than for large ones. At the same time the VAT payments from the smallest businesses make up a very small share of the total VAT revenue of the state. Expressed in another way this means that the cost of collecting one SEK in VAT for the state is greater if it comes from a small business than if it comes from a large one. To illustrate the relationship between compliance costs and VAT revenue for the smallest businesses we present here a calculated example of the effects of a hypothetical turnover threshold of SEK 90,000.

The reason why this calculation is based on this turnover threshold is that the latter is proposed in the report of the Commission of Inquiry into Value Added Tax (Value Added Tax from the judicial perspective of the EC, SOU 2002:74 –Swedish Government Official Reports). The background to the proposal of the commission is the following. The task of the commission was to propose amendments of such a kind that the Swedish VAT rules would agree with those of the sixth VAT directive. One of the proposals of the commission was that the special rule in respect of exemption for the turnover of non-profit public utility associations and registered religious bodies be abolished. To prevent this change from entailing too great an increase in the administrative burden on the bodies and authorities in question it was proposed that a turnover threshold of SEK 90,000 be introduced. The reason why the limit was set at this particular sum is that it is the highest level for exemption admitted according to Sweden's accession treaty with the EU.

The following table shows the material underlying the calculated example

Table 34 Consequences of a turnover threshold of SEK 90,000

	Number	Output VAT	Input VAT	Net VAT	Average compliance costs*, (SEK)	Aggregate compliance costs, m. SEK
Total number with turnover < 90 th. SEK	296,915	2,020	4,429	-2,409	1,258	373
Of which tax-liable where output VAT greater than input VAT	130,828	1,223	508	715	1 113	280
Of which Report VAT in VAT & PAYE return (monthly)	23,528	366	165	201	1 748	41
Report VAT in Income Tax Return (annually)	107,300	857	343	514	974	104

Source: National Tax Board, statistical database GIN-skatt

* Estimated at 50% of the average compliance costs for businesses reporting VAT in their Income Tax Return.

In the tax return year 2003 there were about 297,000 businesses with a turnover below SEK 90,000. They reported altogether about SEK 2 thousand million in output VAT and 4,4 in input VAT, i.e. they reclaimed a net amount of approximately SEK 2.4 thousand million. The reason for the large net refund is that there are many businesses in this group that are in a build-up phase. A mandatory turnover threshold could thus hit many businesses hard. For this reason it is reasonable to argue that a turnover threshold should be voluntary and that it should be businesses that are primarily net payers of VAT that would choose to be exempted from tax liability. The table shows that about 131,000 businesses with a turnover below SEK 90,000 reported output VAT that was greater than input VAT. Totally they paid a net sum of

SEK 715 million to the state. In this context it is not significant if these businesses sell to a final consumer or to a VAT-liable business. This sum is the sum the state would lose as a result of a turnover threshold of this kind. An estimate of the compliance costs for the group in question amounts to SEK 280 million. This means that compliance costs for the group in question make up 40% of the VAT revenue to the state, i.e. the VAT is relatively expensive to collect from the very smallest businesses.

To the aforementioned calculations may be added the compliance costs that accrue with the non-profit associations and religious bodies that would be embraced by the VAT rules. The commission judged that between 10,000 and 24,000 associations and religious bodies would become liable for VAT as a result of the new rules. The magnitude of the compliance costs for these additional tax subjects is very difficult to estimate since the magnitude of their additional VAT handling is unknown. A very rough estimate is that the total costs are between SEK 30 and 70 million.

10 Conclusions

The most important conclusion drawn from this study is that compliance costs burden the smallest businesses proportionately more heavily than the larger ones. This situation has moreover become more severe over the last decade. Beyond this the development of the economy, with the outsourcing of services on the part of large businesses, and the formation of more and more small businesses, entails that the number of tax subjects is increasing. This means that the economic trend entails higher compliance costs without production increasing commensurately.

Given this development it is a matter of urgency to make it easier for primarily the smallest businesses to keep VAT accounts. It is urgent both from the viewpoint of business activity and from that of national economy. If the Tax Board is to fulfil its mandate it is necessary that tax payers generally accept the tax system. From the perspective of the economy as a whole it is important that resources are used in an economically efficient way. Unnecessarily high costs as a result of accounting for VAT are not an efficient use of resources.

This brings us to the question of what may be done to reduce these costs. We do not deal with this question in a particularly penetrating way in this report. Our primary intention has been to provide basic information that may serve as a contribution to the discussion of how the situation of tax payers may be improved. The report contains two quantitative computations of conceivable effects of changes to the VAT system. The first is a computation of the effects on compliance costs of introducing a uniform VAT rate. The other is the effect of a turnover threshold. According to our calculations a uniform VAT rate would result in a reduction of compliance costs by approximately SEK 500 million, whereas a turnover threshold of SEK 90,000 would reduce compliance costs by about SEK 280 million. Together these two changes would thus reduce compliance costs by about SEK 780 million, which corresponds to 12 per cent of total compliance costs.

The goal of the government is to reduce the burden of rules in the field of taxation by 20 per cent by the end of 2010. The two changes described above would thus, if they were carried out, result in the government's goal being achieved by half exclusively in the area of VAT. Considering that the changes are far-reaching, it is evident that the goal is an ambitious one.

The Tax Board must toil on tirelessly to find ways of making the handling of VAT easier for businesses. The most immediate possibility would be of course to simplify the administrative handling on the part of businesses by means of improved information, service and smoother reporting methods. Beyond this it is important that the Tax Board constantly takes part in the work of adapting the regulatory framework to the demands of the world around us. In this way the Tax Board partakes in the great and continuous task of making the work of handling VAT as flexible as possible for all parties. In so far as the concrete target of reducing the burden by 20 per cent is concerned it is nevertheless obvious that greater measures than these will be necessary. When two such far-reaching changes as a uniform tax rate and a turnover threshold only cover half the distance the conclusion must be that a very extensive overhaul is needed if we are to reach the final goal.

Annexe 1 Statistical uncertainties

The postal survey

As described in section 3 the majority of the results in this study build on a statistical survey in which a number of businesses were chosen at random to answer questions about their VAT situation. The premise is that the responding businesses must be representative of all businesses liable for VAT. As in all surveys based on samples, random deviations from the true values can occur. How great these deviations are is not possible to ascertain. On the other hand it is possible to calculate their size with a certain probability on the basis of the variations in the answers that come in. The probability normally used in such a context is 95 per cent. In other words this is how the deviations from the true values are calculated, within which the results lie with 95 percent certainty. We say that the deviations are calculated within a 95 percent confidence interval.

The table below shows the limits of the average and total costs in a 95 percent confidence interval per stratum, i.e. the groups underlying the sample.

Table 35 95 percent confidence interval and total cost per stratum.

No. of employees	Average cost (SEK)	95-percent confidence interval		Total cost (m. SEK)	95-percent confidence interval	
		Lower limit	Upper limit		Lower limit	Upper limit
0	6,185	5,560	6,810	2,405	2,162	2,648
1-4	13,588	12,577	14,598	1,729	1,600	1,857
5-499	22,247	20,051	24,443	1,360	1,226	1,494
Total	9,518	8,593	10,443	5,494	4,960	6,028

The confidence intervals for the average cost are not very large. With 95 per cent certainty the deviation of total average cost is less than SEK 1,000. For the total cost it means a maximum deviation of about SEK 0.5 thousand million.

The table below shows the corresponding confidence interval for the slightly more detailed subdivision of sizes often used in this study. The table shows that the interval of uncertainty is large in the categories containing the very largest businesses. The reason is that the group consists of relatively few businesses with a relatively high spread of costs. Viewed in total there is nevertheless a clear correlation between business size and cost.

Table 36 95 percent confidence interval for average and total cost per business size

No. of employees	Average cost (SEK)	95-percent confidence interval		Total cost (m. SEK)	95-percent confidence interval	
		Lower limit	Upper limit		Lower limit	Upper limit
0	6,185	5,560	6,810	2,405	2,162	2,648
1-4	13,588	12,577	14,598	1,729	1,600	1,857
5-9	20,048	17,333	22,763	612	529	695
10-49	24,049	21,331	26,767	621	551	692
50-499	26,565	13,343	39,787	127	64	189
Total	9,518	8,593	10,443	5,494	4,960	6,028

Other groups

The calculations of uncertainty above refer to businesses included in the postal survey. As was described in section 3 this applies to all VAT registered businesses with less than 500 employees that have a telephone number and are not public authorities. The costs for other categories have been estimated in other ways than by means of a questionnaire sent out randomly. This means that the statistical uncertainty for these can not be calculated in the same way as for those included in the postal survey. The plausibility of these estimates must instead be based on individual assessments. Our judgement is that the systematic interviews and estimates that underlie the cost calculations for these other groups are sufficient to accomplish plausible estimates. This is relevant especially as none of these groups is of great significance for the total result.

Basis for grossing up

When the average cost for different groups is grossed up to a total figure, SCB's statistics of VAT registered businesses are used. These statistics refer to the number at a certain point in time. As businesses are constantly being added and removed from the register in the course of a year the total number that was registered some time during the year is greater than the number that is registered at a given point in time. This means that the grossing up to a total figure is an underestimate. In 2003 about 927,000 businesses were VAT registered at some time. According to SCB figures for grossing up to a total figure 830,000 businesses were VAT registered at the time of the survey in 2003. Thus there is a large turnover of VAT registered businesses during a year. Since most of these businesses probably had little or no business activity during the year and thereby low or non-existent compliance costs we judge that the underestimation is small in relation to the total cost.

The postal survey sent out to a representative sample of businesses embraced all VAT registered businesses with less than 500 employees, that had a telephone number and that were not public authorities. The reason why the sample was limited to businesses with telephone numbers was that in our judgement businesses without telephone numbers in many cases have a lower level of business activity. For instance it may be that businesses are registered but have not yet got started with their activity, that they are indeed VAT registered but the business is conducted sporadically or that they are phasing out the business. The cost for these is therefore assumed to correspond to 25 per cent of the costs of businesses with telephone numbers in the corresponding size category. We judge this to be a careful estimate that does not overestimate the costs.

The 1993 survey

In the 1993 survey the costs of the smallest businesses have been estimated by other methods than in the 2005 survey. In the 1993 survey the costs for the group of businesses with 0 to 4 employees were calculated by estimates *inter alia* on the basis of information from accounting consultants. In these estimates it is assumed that it requires on average about 20 hours /year to draw up a VAT return irrespective of business size. This corresponds to SEK 2,500 in the money value of that time. Including day-to-day handling of VAT the total cost is estimated at SEK 4,000 in the money value of that time. Converted to the salary levels used in the 2005 survey this cost corresponds to SEK 7,328. For businesses not registered for VAT the cost is estimated at SEK 500 which, converted to the 2005 survey's cost level, corresponds

to SEK 916. Since the costs for the smallest business have been worked out using different methods in the two surveys there is an uncertainty about comparability. We judge however that the estimates in the surveys of both years refer to the same type of activity and have been made on such good basic material that the costs are comparable.

Before the figures in the 2005 survey are compared to the 1993 survey the original material is adjusted in a number of respects. Firstly the price level is converted to that of 2005. Secondly the grossing-up is made to a total level from the same base, i.e. the grossing-up is performed for both years with SCB's statistics for VAT registered businesses as a base. Thirdly the figures are scaled down for businesses without telephone numbers in the same way as was done in the 2005 survey. Since the 1993 survey also aimed only at businesses with telephone numbers the same precautionary adjustment must be performed on these figures too. We have judged that the same adjustment should be done to all categories, also to businesses with between 0 and 4 employees not included in the postal survey sample. Indeed, nothing in the 1993 survey indicates that this group was considered in any other way than as having the same level of activity as in other groups. So that the conclusions in the report shall not be able to be questioned because of the adjustments due to the assumption about a lower activity level the table below shows comparisons of the two surveys without the precautionary adjustments for businesses lacking telephone numbers. Instead it is assumed that businesses without telephone numbers have the same costs as other businesses in the same size category.

The table shows that the pattern identified previously is reinforced, i.e. that the costs have increased for the smallest businesses at the same time as they have gone down simultaneously for the larger ones.

Table 37 Comparison of VAT compliance costs 1993 and 2005 without precautionary adjustment for lower activity level for either of the years

	<u>No. of businesses</u>		<u>Average cost</u>		<u>Total cost m. SEK</u>		<u>Volume</u>	<u>Change</u>	
	<u>1993</u>	<u>2005</u>	<u>1993</u>	<u>2005</u>	<u>1993</u>	<u>2005</u>		<u>Cost</u>	<u>Net</u>
0-4 employees	634,908	766,134	4,565	7,537	2,898	5,774	989	1,887	2,876
5-9 employees	24,896	31,799	36,640	19,312	912	614	133	-431	-298
10-49 employees	19,140	26,161	40,304	23,760	771	622	167	-317	-150
50-499 employees	3,930	4,865	67,784	26,003	266	127	24	-164	-140
500- employees	416	425	599,064	633,991	249	269	6	15	20
Public sector employees	1,142	1,038	205,184	76,431	234	79	-*	-*	-*
Total	684,432	830,422	7,790	9,014	5,332	7,485	1,319	989	2,308

As the change in costs between 1993 and 2005 is great in the smallest group of businesses and in addition has gone in the opposite direction to the other groups, at the same time as the costs of this group were calculated in another way in the 1993 survey, there may be grounds for studying this group more closely. The table below shows the results of a comparison between the two years where the smallest group, contrary to the calculations above, has not been treated in a consistent manner with regard to the assumption of a lower activity level when telephone numbers are lacking. The inconsistency consists in not performing the precautionary adjustment of the costs in the 1993 survey for lower activity level. The purpose of this is to perform a sensitivity analysis that gives consideration to possible objections that this group for some reason ought to be given special treatment in this respect. The change in

costs on these assumptions is not as dramatic for the smallest group. The pattern remains as the same as before. Costs have increased for the smallest businesses and gone down for the larger ones.

Table 38 Comparison of VAT compliance costs 1993 and 2005 where precautionary adjustment for lower activity level was performed in all categories except in the smallest size category in 1993 figures

	<u>No. of businesses</u>		<u>Average cost</u>		<u>Total cost m. SEK</u>		<u>Volume</u>	<u>Change</u>	
	<u>1993</u>	<u>2005</u>	<u>1993</u>	<u>2005</u>	<u>1993</u>	<u>2005</u>		<u>Cost</u>	<u>Net</u>
0-4 employees	634,908	766,134	4,565	5,931	2,898	4,544	778	867	1,645
5-9 employees	24,896	31,799	34,330	19,266	855	613	133	-375	-242
10-49 employees	19,140	26,161	39,626	23,752	758	621	167	-304	-137
50-499 employees	3,930	4,865	67,538	26,003	265	127	24	-163	-139
500- employees	416	425	597,984	633,991	249	269	6	15	21
Public sector employees	1,142	1,038	203,297	76,431	232	79	-*	-*	-*
Total	684,432	830,422	7,682	7,444	5,258	6,253	1,108	40	1,148

Finally the question arises of how sure the observed pattern is, i.e. that costs have increased for the small businesses and decreased for the large. Since all costs for all groups are not estimated by means of random sample is not possible to do a proper statistical calculation of the uncertainty. We judge, however, on the basis of the confidence intervals shown in the introduction to this annexe, that the differences between the groups are so large that the result may be considered reliable. This applies irrespective of which assumptions are made regarding the sample population and possible correlations between telephone numbers and activity levels.

Annexe 2 Nutek's measurement of the administrative costs in businesses.

Background

Commissioned by the government Nutek⁴⁸ has been carrying out the task since the autumn of 2003 of measuring the administrative burden imposed on businesses by the regulatory frameworks. The first area measured was the Value-Added Tax Act and in the autumn of 2004 Nutek reported the results of their measurements in two reports.⁴⁹ The purpose of Nutek's measurements is to serve as a basis for regulatory improvements and that administrative costs should be capable of measurement over time. The concept 'administrative burden' was established by the government and can not be equated with the concept 'compliance cost'. Administrative burden means the costs incurred by businesses in preparing, storing or transferring information to public authorities and/or to third parties and thus has a narrower scope than the concept compliance costs. Accordingly, Nutek's measurement does not aim at bringing out the entire cost that businesses carry as a result of handling VAT.

In view of the extensive work carried out by Nutek to measure the administrative burden the question may be asked why the Tax Board chose to carry out an additional measurement. The most important answer is that the Tax Board wishes to carry out a study that can be compared with the study of 1993 and in this way form a conception of how the changes that have taken place since then have affected compliance costs. The Tax Board also views this study as supplementary to the Nutek study and that it may be used, together with the Nutek study, in the work of lightening the burden carried by businesses.

Differences in method

The differences between Nutek's measurement and the Tax Board survey are partly a matter of difference in method and partly of the fact that the two surveys are have a difference in scope. Below is a list of some of the most important differences between the two surveys.

- Nutek's method builds on measuring the costs of every individual item of information required by the legislation and the results are based on an evaluation, after interviews with businesses and experts, of how much time it takes for a normally efficient business to comply with the requirements of the law. The model thus does not take into consideration whether some businesses are particularly inefficient and vice versa. On the other hand in the Tax Board survey, which is based on a representative sample of all

⁴⁸ Swedish Agency for Economic and Regional Growth

⁴⁹ Measurement of the Administrative Burden on Businesses, Main Report: Methods, organisational proposals and resource estimates, Infor 035-2004 and Measurement of the Administrative Burden on Businesses, Groundwork Report: Methodological development and pilot measurement of the VAT Act using the Standard Cost Model. (Mätning av företagens administrativa börda, Huvudrapport: Metodbedömning, organisationsförslag samt resursbedömning, Infor 035-2004 samt Mätning av företagens administrativa börda, Underlagsrapport: Metodutveckling och pilotmätning av mervärdesskattelagen med StandardKostnadsModellen).

businesses, all deviations from the 'business of normal efficiency' norm will be included.

- Nutek's measurement aimed at the activities in businesses connected with the invoicing, bookkeeping registration and accounting of VAT, i.e. the costs incurred by the business when the business 'is running as usual'. Judgement issues that confront businesses when they have to handle complex VAT rules were however not included in the grossing up of the total costs to businesses, but were described only in qualitative terms. The Tax Board survey aims at studying the true costs incurred by the business sector in connection with reporting VAT and thereby gives special attention to those costs that result from the complexity of the legislation.
- There are no statistics today that show how many businesses rely on external assistance. Accordingly, Nutek made the assumption that all businesses filing VAT returns rely on external assistance. The cost of this assistance was estimated with the help of accounting consultants. Nutek assumed further that businesses that file monthly VAT and PAYE returns handle VAT internally. In fact many businesses that file monthly VAT and PAYE returns rely on external assistance and not all businesses that file VAT returns in the annual income tax return rely on external assistance. In the Tax Board survey businesses themselves have been allowed to state whether they rely on external assistance and how much they pay for it.

Comparison of results

According to the Tax Board survey total VAT compliance costs amount to SEK 6.3 thousand million. The administrative burden in Nutek's measurement amounts to SEK 2.7 thousand million. On first impression this is a very large difference. If we however analyse the results considering the different methods used and the difference in scope then the difference no longer appears to be so dramatic. In the Tax Board survey businesses stated that they devote 62 per cent of their time to day-to-day handling of VAT, which corresponds to SEK 3.9 thousand million. Considering that the administrative burden in Nutek's measurement may be said to correspond to the day-to-day handling of VAT, it is perhaps preferably this figure we should use in making the comparison.

In summary it may be said that the two models have different strengths and weaknesses. Nutek's model gives more detailed information about the burden resulting from individual rules but does not measure the total compliance costs of handling VAT. The Tax Board model on the other hand reflects the total cost more properly but does not at the same time give the same detailed information about the effects of different rules. The difference may also be said to reflect the different purposes of the two surveys. Nutek's survey seeks to reflect the micro level by putting price labels on individual rule changes and the changes over time. The exact cost is thus not so important. The Tax Board, in its survey, seeks more to maintain a macro perspective. The starting point is a total cost that then can be divided between different types of tax payers. This macro perspective give a more lucid and general account of how the VAT system functions from the viewpoint of efficiency. It also gives us a conception of the total costs to society that are associated with handling VAT.

Annexe 3 The introduction of VAT and the development of the rules

From turnover tax and sales tax to value added tax

Disregarding the general sales turnover tax that existed during the years 1940 to 1946 the first general consumption tax was introduced in 1960 with the general sales tax. With some exceptions this embraced all goods that had the character of personal property. Services were taxed only in those cases where there was a connection to a taxable commodity. Tax was levied only on the final transaction, i.e. between retailer and consumer. The tax rate was four per cent when it was introduced. The big problem with the sales tax was partly to decide whether it was a commodity or a service that had been delivered and partly whether the sale was to a final consumer.

General sales tax was replaced in 1968 by a value added tax of the current model meaning every link in the chain of production and distribution carries the tax levied on the incremental value added to the commodity or the service. Hence the name value-added tax (VAT). Since VAT is charged at every stage of the chain of supply on the entire sales amount (so-called output VAT) but at the same time the VAT charged on the previous stage (so-called input VAT) may be deducted, the effect is that VAT is only calculated on the value added by each stage of the process.

Example:

Timber merchant A sells to furniture factory B:

Invoice to B		VAT accounting	
Timber	500 SEK	Output VAT	125 SEK
Vat 25%	125 SEK	Input VAT	0 SEK
Invoiced amount	<u>625 SEK</u>	To the state (125-0)	<u>125 SEK</u>

Timber merchant B sells to furniture shop C

Invoice to C		VAT accounting	
Bookshelf	1 400 SEK	Output VAT	350 SEK
Moms 25 %	350 SEK	Input VAT	125 SEK
Invoiced amount	<u>1 750 SEK</u>	Till the state (350-125)	<u>225 SEK</u>

Furniture shop C sells to customer D:

Cash price to D		VAT accounting	
Bookshelf	2 500 SEK	Output VAT	500 SEK
(incl. VAT 500 SEK)		Input VAT	350 SEK
		To the state (500-350)	<u>150 SEK</u>
		Total VAT to the state	<u>500 SEK</u>

As is evident in the above example the VAT from the different stages (SEK 125 + SEK 225 + SEK 150) will always tally with the VAT the final customer has had to pay

The tax rate was 10 per cent when introduced, but was successively increased afterwards. With odd exceptions VAT was charged on the same goods and services as the general sales tax. For certain goods and services the taxable value was reduced to 60 or 20 per cent of the remuneration.

In the VAT Act the tax liability of commodities was more or less general. The commodities that were exempted from tax were individually specified in the law. The exceptions were either qualified or unqualified. If you supplied goods that were qualified exceptions you were entitled to make a deduction of input tax on purchases in your accounts. This was something that did not fall to the person who supplied goods that were unqualified exceptions to tax liability. Tax liability did not apply generally to services on the other hand. Only services individually specified in the law were taxable.

The principle of taxing added value is that tax liability applies to the taxable sale in Sweden of goods or services transacted in the course of professional business. In addition imported goods are also liable for tax. In this case VAT is paid to the Swedish Customs. In the case of export no VAT is charged.

Value-added tax after the tax reform

Tax liability and tax rates

A far-reaching tax reform was carried out in 1991. This reform meant that value-added tax became more uniform and similar in respect of tax liability and tax rates. In principle all professional sales of goods and services were embraced by value-added tax after the tax reform. As a result of this the taxable area was extended considerably. Only odd exceptions to tax liability were retained. In principle the most important change was that services began to be treated fully in the same way as commodities, i.e. a service was taxable unless special exemption was specified in the law.

The tax reform abolished the rules for reductions that previously existed for certain kinds of business. In order for the VAT system to be uniform and neutral in regard to competition a general tax rate of 25 per cent was introduced to apply irrespectively of which goods and services were being sold.

Even after the tax reform some exceptions to tax liability were retained. The most important exceptions were:

- Letting and sale of a property except a hotel business or camping site business
- Newspapers for the general public
- Pictorial art owned by the originator or his/her estate after death
- Cinema, theatre and opera performances and library and museum service
- The activities of non-profit associations
- Financial services and insurance
- Health care, dental care, social services and education
- Postage stamps, banknotes and coins
- Lotteries, gambling and games

Accountability

Before the tax reform there was no duty to report and pay VAT to the state until annual sales turnover was above SEK 30,000. This threshold for accountability was abolished as part of

the tax reform, which meant that all who were engaged in value-added taxable business were to pay VAT from the first Crown.

Reporting VAT could be done in a number of ways after the tax reform. Those liable for tax with an annual sales turnover above SEK 200,000 and those liable for tax but were not obliged to file an annual general income tax return were to be VAT-registered and file special VAT returns. Those liable for tax with an annual sales turnover below SEK 200,000 were normally to report VAT in the general annual income tax return.

For those who reported VAT in the special value-added tax return the taxable period was two months according to the basic rule. The tax return was to be submitted not later than the 5th of the second month after the end of the taxable period (a VAT return for the period January-February was to be filed not later than 5th April).

Changes of rules after the tax reform

The uniform VAT of the tax reform is weakened

The neutral and uniform 25 per cent VAT for all taxable goods and services introduced with the tax reform succeeded in remaining in force for only one year. Already at the beginning of 1992 a VAT rate of 18 per cent was introduced for certain goods and services. After one year the lower rate was raised from 18 per cent to 21 per cent and after another six months a further tax rate of 12 per cent was introduced. Two and a half years after the introduction of the tax reform (from 1 July 1993) Sweden had three different rates of VAT:

- 25 per cent is the general rate of value-added tax on all taxable goods and services if nothing else is prescribed
- 21 per cent is VAT on food i.e. VAT on food provisions and restaurant services
- 12 per cent is VAT on hotel service, camping sites, travel and transport in ski-lifts.

On the 1st of January 1996 the 21 per cent tax rate was abolished. The tax on food was lowered at the same time to 12 per cent. Sweden continued however to have three rates of value-added tax after the simultaneous introduction of a 6 per cent value-added tax. During the first year it applied only to daily newspapers and entrance fees to cinemas (previously tax free) but was extended after a few years to embrace other goods and services.

In 1977 tax liability was extended to include a number of goods and services that had been tax-free previously. This applied among other things to entrance fees for concerts, circuses, theatres and similar amusements, entrance fees to sports events and events connected with the practice of sports activities (if provided by the state, municipality or a public utility non-profit association it was still tax-free), the transfer of certain copyrights to literary and artistic works as well as library and museum services. These services were charged only at the 6 per cent rate. At the same time education (other than the Swedish nine-year compulsory school, the upper secondary school and university education), archive services and certain services regarding cinematographic film became taxable, but they were charged at the full rate of 25 per cent value-added tax.

In 2001 and 2002 the value-added tax on some more goods and services was reduced to 6 per cent. This applies to conveyance of persons (previously 12 per cent) and to entrance to zoos and to books and magazines (previously 25 per cent).

A new value-added tax law is introduced

On the first of July 1994 a new value-added tax law came into force (SFS 1994:200; ML) replacing the previous law of 1968. The structure of the new law and the system by which it functions differ from the previous law. The intention was to create a more lucid and more uniform law as well as to make it better adapted to the regime in force within the EU. With the new law a number of central concepts acquired new meanings and certain technical changes were made.

EU-membership entails new value-added tax rules for trade within the EU

The most extensive change in the VAT rules came on 1st January 1995 with Sweden's membership in the EU. Membership entailed both that the Swedish VAT law was adapted to the directives that regulate the value-added tax legislation in the EC and also that special rules were introduced regarding trade with goods and services between countries within the EC. The new rules regarding trade within the EC are briefly the following.

When goods are purchased from a VAT registered business in another EC country- *inter-community acquisitions*- value-added tax is not to be paid to the Swedish Customs. VAT is instead charged to the buyer who reports it as output tax in his regular accounts- *acquisition tax*. The business that has made an inter-community acquisition is awarded a deduction for an amount equivalent to that paid in acquisition tax in accordance with the general rules for deduction of input tax.

The sale of goods to another VAT registered business in another EC country – *EC delivery* - is not taxable. To verify that the sale really took place to a VAT registered business in another EC country businesses must report all their EC deliveries in a *quarterly report*. It is submitted every quarter and must contain details of the *VAT-number* (the VAT registration number for inter-community trade) of each respective customer and the total amount of sales to the respective customer.

Special rules apply when three VAT registered firms in different EC countries are involved in a transaction where the goods are delivered directly from one of the countries to the firm in the third country- *triangular business*.

In the event of mail-order sales or corresponding remote *sales* to Sweden from another EC country Swedish VAT must be charged if the seller's aggregate sales to Sweden are above SEK 320,000 per year. Otherwise the seller charges the foreign VAT. A Swedish firm with mail-order sales to another EC country may become liable for tax on such sales in the other EC country in accordance with the VAT rules in force there.

The acquisition of *new means of transport* (different types of vehicle, large boats and aircraft) are to be taxed in Sweden even if they were purchased in another EC country.

EU-membership has also given rise to other changes in the value-added tax rules. Among other things Sweden has had to replace its system of deduction of fictitious VAT on the purchase of goods from private persons with a system whereby in a later sale of these goods tax is only added to the profit margin. Some travel services are also to be marginally taxed.

Altered tax periods and times

At the beginning of 1996 the taxable period was altered for those businesses that report VAT in the VAT and PAYE return from two months to one month. For the largest businesses (from the first of January 1996 the threshold was a turnover of SEK 10 million and on the first of July 1996 the threshold was raised to SEK 40 million) the point in time for filing a tax return was brought forward to the 20th of the month after the month to which the return refers. Other businesses were to submit their VAT return not later than the 5th of the second month after the month to which the tax return refers as previously. At the same time as the tax period was shortened the upper threshold determining which businesses were to report VAT in the annual income tax return was raised from SEK 200,000 to SEK 1 million.

The next big alteration in respect of filing returns and paying value-added tax took place at the beginning of 1998 through the introduction of a tax return common to VAT and employers' social security contributions (payroll tax). In connection with this the points in time for reporting and paying VAT were also changed. For firms with a turnover under SEK 40 million this meant that VAT was to be reported and paid at the latest on the 12th of the second month after the month to which the tax return refers, meaning an increase of the time limit by one week. For firms with a turnover above SEK 40 million the time for filing a return was put back by six days to the 26th of the month after the month to which the return refers. From February 2006 the tax return form will look different. It will consist of one page for VAT and one page for employers' social security contributions. The contents of the VAT return will nevertheless be unchanged.

At the same time as the common tax return was introduced a new system of payment for the taxes of businesses was introduced. By this, every business was given a clearing account for tax kept at the tax authority over which all taxes and charges are reported. Since 2003 businesses have access to their tax accounts on the Internet.

From the 8th of March 2001 businesses are entitled to submit an electronic tax return via the Internet instead of submitting a tax return in document form. Currently about 5.5 per cent of firms file their returns via the Internet.

Changes in the VAT return

Directly after the tax reform in 1991 filling in the value-added tax return was fairly simple. It contained one line for output tax, one line for input tax and one line for tax to pay or to be recovered (i.e. output tax less input tax). In addition to this there were three lines for recorded sales turnover, taxable sales turnover, tax-free sales within Sweden and export sales turnover. Finally there was also a line where one was to fill in tax on private withdrawals (this sum was also to be included in the output tax on the first line).

Figure 2: Form for VAT return after the tax reform 1991.

In step with VAT rules becoming increasingly complicated the appearance of the VAT return form was altered. The first alteration took place in 1992 with the introduction of an extra VAT rate of 18 per cent. The output tax was then divided between two lines, one for 25 per cent VAT and one for 18 per cent VAT. When the lower VAT rate was altered and a further VAT rate was created corresponding alterations were made in the VAT return form. The first large alteration to the layout of the VAT return form did not come until 1995 and Sweden's accession to the EU. In the space for input tax a line was added for output tax on goods acquired from the EC and in the space for details of sales turnover a line was added for supplies of goods to the EC and acquisition of goods from the EC. At the same time the specification of tax on private withdrawals vanished.

The next big change in the tax return happened when at the beginning of 1998 a tax return was introduced that was common to VAT and employers' social security contributions. At the same time the space for details of VAT increased from one third of an A4 page to half an A4 page. The extra space was used to increase the specification of VAT data. Among the details of output and input VAT a line of its own was introduced for output VAT on the acquisition of services abroad. A specification of output and input VAT on letting of business premises was also added. The biggest alterations however refer to details of sales and purchases of various kinds. In this respect the degree of specification increased by dividing up trade with other countries over several lines and by the addition of details of sales amounts and base figures for calculation of tax on marginally taxed goods and services.

The VAT section of the tax return still contains the same information as at the introduction of the tax return in 1998. Nevertheless the question is being discussed at present whether the VAT and employer contribution parts of the tax return should be separated and be made into two separate tax returns. In connection with this an overhaul will be made of what information is to be supplied in the respective tax returns.

Figure 3 The VAT part of the tax return

Deklarationen ska finnas hos RSV på deklarationsdagen.
(Adress, se baksidan.)

Skattedeklaration

01 Deklarationsdag	02 Person-/Organisationsnummer
--------------------	--------------------------------

Momsreg.nummer/VAT-nummer

Moms att deklarerera för

Omsättning inom Sverige

Momspliktig omsättning inom Sverige **11**

Momsfri omsättning inom Sverige **12**

Momspl. uttag av fastighetsförvaltningstjänster **13**

Omsättn. av marginalbeskattade varor och tjänster **14**

Beskattningsunderlag för marginalbeskattad omsättn. **15**

Exportomsättning och EG-handel

Omsättning av varor utanför EG (export) **21**

Omsättning av tjänster till utlandet **22**

Omsättning av varor till annat EG-land ¹ **23**

Överföring av varor till annat EG-land ¹ **24**

Förvärv av varor från annat EG-land **25**

Trepartsförvärv av varor från annat EG-land ¹ **26**

VERKSAMHETSLOKALER - skattskyldighet för uthyrning

Utgående moms (ingår vid kod 32) **30**

Ingående moms (ingår vid kod 37) **31**

Moms att betala eller få tillbaka

Utgående moms 25 % **32**

Utgående moms 12 % **33**

Utgående moms 6 % **34**

Utg. moms på varuförvärv från annat EG-land **35**

Utg. moms på tjänsteförvärv från utlandet **36**

Avdragsgill ingående moms **37**

Moms att betala eller få tillbaka **39**

Table 39 The most important changes of VAT rules after the tax reform 1991

Year	Tax liability	Tax rate	Other changes*
1992	-Management of mutual funds exempted from tax. -Exemption from tax liability for transport of patients abolished (1 May 1992).	-tax rate for food, restaurant services, hotel and camping site services, travel, conveyance in ski-lifts altered from 25 % to 18%	
1993	-Exemption from tax for medically justified foot care, provision of premises or site for performance of sports or athletics as well as for vessels or aircraft.	- tax rate for food, restaurant services, hotel and camping site services, travel, conveyance in ski-lifts altered from 18 % to 21% (1 Jan. 1993) - tax rate for hotel and camping site services, personal conveyance and transport in ski-lifts altered from 21 % to 12% (1 July 1993)	
1994		-Tax rate for forwarding of mail altered from 25 % to 12 %	-New value-added tax law from 1 July 1994 -voluntary tax liability introduced for sub-letting of business premises (1 July 1994) -Definition of passenger car altered; does not include vehicle with coachwork of which driver's cabin is separate coachwork unit (1 July 1994)

1995	<p>-Exemption from tax for sale of pictorial art owned by the originator or his/her estate after death abolished. Simultaneously tax liability is introduced if the basis for calculation of tax amounts to at least 300 thousand SEK.</p> <p>-Transport of patient is exempted from VAT.</p>	<p>-Tax rate for restaurant services changed from 21 % to 25 %</p> <p>-Tax rate for forwarding of mail changed from 12 % to 25 %</p> <p>-Pictorial art taxed by 12% (previously exempt)</p>	<p>-Sweden member of EU entailing inter alia introduction of rules governing inter-community acquisition, tax on acquisitions (reversed tax liability) and quarterly reporting</p> <p>-A system is introduced for adjustment of deductions of input VAT on capital investment goods used in business that only partly entail tax liability.</p> <p>-Tax on profit margins on second hand goods and the right to deduct fictitious tax abolished (1 November 1995)</p>
1996	<p>-Exemption from VAT for entrance fee to cinemas abolished</p> <p>-Exemption from tax liability for daily newspapers abolished</p>	<p>-Tax rate for food altered from 21% to 12%</p> <p>-Daily newspapers taxed by 6% (previously exempt)</p> <p>-Entrance fee to cinemas taxed by 6 % (previously exempt)</p>	<p>-Tax period curtailed from two months to one month</p> <p>-Point in time for filing tax return and paying tax for businesses with sales turnover above 40 m. SEK changed from the 5th of the second month after the taxable period to the 20th of the month after the taxable period (1 Jan. 10 m. kr, 1 July 40 m. SEK)</p> <p>-Threshold for reporting VAT in annual income tax return changed from 200 thousand SEK till 1 m. SEK.</p> <p>- Marginal taxation of travel services within EU introduced.</p>
1997	<p>Following areas previously exempt are taxed:</p> <p>Entrance to sports events and performance of athletic activity not provided by the state, municipality or a public utility non-profit association</p> <p>-educational services, except the Swedish nine year compulsory school, the upper secondary school and university education</p> <p>-the sale of certain copyrights to literary and artistic works</p> <p>-entrance to concerts, circuses and other similar performances</p> <p>-library, museum and archival services not supported by public funds</p> <p>-certain services related to cinematographic film</p>	<p>-The goods and services specified on the left are taxed at 6% except education, archival services and certain services related to cinematographic film which are taxed at 25% (previously exempt)</p>	<p>-Possibility of reporting VAT for a whole year at one time in the VAT return introduced for trading companies with a tax base not over 200 thousand SEK annually</p>
1998			<p>-Common tax return for VAT and employers' social security contributions</p> <p>-Tax clearing account introduced meaning that every business is given a tax account kept by the tax authority on which all accounting and payments is recorded.</p> <p>-Point in time for filing tax return and paying tax for businesses with a sales turnover below SEK 40 million changed from the 5th to the 12th of the second month after the taxable period and for businesses with a sales turnover over 40 m. SEK the time is changed from 20th to 26th in month after taxable period.</p>

1999	-Exemption for health care performed by person specially qualified expanded to include also chemists, dispensers, occupational therapists, hospital physicists -Tax-free sales on EU-internal trips terminated. Tax exemption retained for goods to be used for direct consumption on board and for sales on third country travel (1 July 1999)		
2000	-Services related to opening graves or care of graves in a public graveyard are exempted from tax. - Exception for travel over bridge or tunnel between Sweden and other country abolished		
2001		-Tax rate for personal conveyance changed from 12% to 6% -Tax rate for entrance to zoos changed from 25% to 6%	-Alterations to the rules for voluntary tax liability in respect of letting of business premises -Alterations made in the so-called adjustment rules for correction of input VAT
2002		-Tax rate for books and magazines is changed from 25% to 6%	-Requirement that a foreign business owner liable for VAT in Sweden must have a legal representative is abolished for business owners from EU countries as well as Norway and Åland
2003			- Transaction of intermediation of cultural activities, transport-related services etc. shall be considered to have taken place in that country where the underlying service is performed -Insurance services are to be considered sold in the place where the customer is established -Alterations in the rules for VAT on electronic services. Businesses outside the EU selling electronic services to several countries within the EU now need only one contact in the Union
2004			Certain changes made in invoicing rules for VAT. In addition, in the sale of means of transport an invoice need no longer be issued if sale is to private persons in Sweden. The threshold amount before obligation to invoice is removed
2005	VAT on rental of dry storage places for boats and caravans is introduced		

* Accountability, tax periods, threshold amounts etc.

Annexe 4 Technical report with survey questionnaire

The Swedish National Tax Board

*

Business compliance costs of VAT

Project no. 16379

Göteborg 7 February 2006

Customer responsibility: Jonas Persson
Project manager: Matz Johansson
Data responsibility: Jan Lundmark

Information about the survey and its background

In 1994 the Swedish National Tax Board carried out a survey of the costs incurred by business enterprises when fulfilling their duties under the Value Added Tax (VAT) Act. Since then the requirements under the VAT Act have changed in many ways, as a rule in such a way that requirements have increased. The most important changes since the previous survey are that the VAT taxable period has changed from two months to one month, that two reduced tax rates have been introduced and that Sweden's EU membership has entailed a number of special requirements.

The National Tax Board has now once again conducted a survey of the costs incurred by businesses for compliance with the rules for keeping VAT accounts and filing VAT returns. The aim of the survey has been as follows:

- To estimate the total costs businesses incur in complying with the requirements of the VAT Act.
- To estimate the change in this cost since the aforementioned survey and
- To identify areas that are particularly onerous for businesses.

The general goal is to find a starting point for a discussion of the size of the burden that is placed on businesses and whether, and in that case how, this burden can be made lighter.

The survey has been conducted by means of a postal survey in which a representative sample of businesses have been asked about the costs they incur in handling VAT. These costs have subsequently been grossed up to a total amount for the entire population. A number of background variables make it possible to identify differences between various categories of business enterprise. This information about differences can then be used in the analysis of how different requirements and rules influence the costs to businesses. But the background variables that are specific to rules are supplemented by questions about attitudes and this extends the possibilities of analysing the burden.

The background variables intended for use are:

<u>General</u>	<u>Rule-related</u>
- Turnover	- Supplies from other EC country
- No. of employees	- Sales to other EC country
- No. of supporting vouchers (invoices)	- Import from third country
- Length of time the business has been active	- Export to third country
- Branch of commerce or industry(not a question in the survey, the sample should be possible by use of SNI codes (standard for Swedish classification of business branches)	- No. of tax rates charged on the sales turnover of the business - Mixed business activities
- Use of external help with keeping VAT accounts and filing VAT returns	Voluntary tax liability

Conduct of the survey

The Swedish National Tax Board has in cooperation with Kinnmark Information and TNS Gallup worked out the plan for field work and the materials for the survey (for the questionnaire, see annexe). Kinnmark Information was in charge of sampling, production of materials for the survey, mailings, reminders, day-to-day status reports and scanning of incoming questionnaires. TNS Gallup was in charge of telephone interviews, production of tables, SPSS files (Statistical Package for the Social Sciences) as well as statistical analysis and consultation.

The field work was performed by means of a postal survey with a covering letter to 4,000 organisations in the following target group:

VAT registered organisations both with less than 500 employees and with a telephone number (the target group does not include public authorities)

The sample was drawn from Statistics Sweden's business register and was negatively coordinated with the samples for the Tax Board's National and Regional Surveys of business enterprises, 2005.

The sample was stratified as follows

Stratum	No. of employees	Number in sample	Number in population
0 employees	0 employees	1,000	392,698
1 – 4 employees	1 – 4 employees	1,500	121,894
5 – 499 employees	5 - 499 employees	1,500	62,711
	5-9 employees	748	31,696
	10-19 employees	381	16,650
	20-49 employees	238	9,500
	50-99 employees	73	2,860
	100-199 employees	35	1,294
	200-499 employees	25	711
	Total	4,000	577,303

Field work began week 35, 2005 and was completed week 43, 2005.

Field plan

First mailing	Contained a questionnaire, covering letter and a reply envelope
Reminder 1:	An A5 (155x220mm) size card addressed to those who have not returned their questionnaire.
Reminder 2:	Contained a questionnaire, covering letter and reply envelope.
Telephone follow-up:	Telephone interviews with a sample of those who did not participate in the postal part of the survey.

TNS Gallup is a member of SMIF and ESOMAR and follows the business rules of these organisations This means *in te alia* that all personnel are bound by a duty of confidentiality

and that returned questionnaires and other survey materials are handled in such a way that the respondents' anonymity can be guaranteed.

Weighting

The data was weighted according to the number of employees in the population. Postal interviews and telephone interviews have been weighted separately. The postal interviews have been weighted against the population in the country as a whole. Telephone interviews are weighted correspondingly. The total number of telephone interviews has in addition been grossed up to represent the entire sample. The target figure (the number that the telephone interviews must be weighted to) is calculated by means of the following formula:

$(ns/n) + ((1-ns/n)*(nts/nt))$	
ns/n:	Number of postal interviews divided by the total sample
1-ns/n:	Remainder of sample
nts/nt:	Number of telephone interviews divided by telephone sample

The weighted frequency of response is given in the table below.

Significance figures and bases in the tables.

The result of the survey is presented in tables in the annexe.

In the tables significant differences between columns belonging to the same question are tested against each other (for the question 'number of years in active business' the column with 'less than one year' has thus been tested against the other two columns, and so on). A letter following a value in a cell indicates that the value is significantly higher than the value in the corresponding cell in the column indicated by the letter.

The head of each table contains the base for the respective column. The base is given both weighted and unweighted and as an absolute number.

In significance testing an 'Effective base' is used instead of the weighted or unweighted base. The effective base is used to reduce the probability of deviations being marked as significant due to the weighting of data. The effective base of a column is calculated (with some simplification) according to the following formula:

$e_i = \frac{(W_i)^2}{\sum W_{ik}^2}$	
$(W_i)^2$	= the squared sum of weight factors in a column
$\sum W_{ik}^2$	= sum of squared weight factors in a column

When the effective base is lower than 100 this is marked by an asterisk (*) placed beside the weighted base. Two asterisks (**) mean that the effective base is lower than 30 – in this case this column is not tested for significance. The effective base is clearly lower than the unweighted base when the difference between the highest and the lowest weight in a column is great.

Field work

Postal fieldwork

	Total	Businesses without employees	Businesses with 1-4 employees	Businesses with 5-499 employees
Gross sample	4,000	1,000	1,500	1,500
Returned mail	44	23	13	8
<i>Address unknown</i>	30	16	7	7
<i>Business dormant</i>	10	7	3	0
<i>Deceased</i>	1	0	0	1
<i>Disabled</i>	1	0	1	0
<i>Sick</i>	2	0	2	0
Net sample	3,965	977	1,487	1,492
Returned filled-in questionnaires	1699	315	658	726
Mail response frequency (net)	43%	32%	44%	49%

Telephone interviews

	Total	Businesses without employees	Businesses with 1-4 employees	Businesses with 5-499 employees
Businesses to approach	2,290	678	839	773
Numbers not dialled	827	9	394	424
Dialled numbers (telephone sample)	1,463	669	445	349
Numbers not used	374	59	100	215
Unavailable (total)	456	294	124	38
<i>Wrong number/Fax etc</i>	229	148	67	14
<i>Not reached (< 16 attempts to make contact)</i>	3	2	1	0
<i>Not interviewed within the field work period</i>	98	52	32	14
<i>Not target group</i>	115	83	23	9
<i>Language problems</i>	8	7	1	0
<i>Sick/disabled</i>	3	2	0	1
Refusal (total)	255	140	80	35
Already interviewed/double	36	18	11	7
Interviewee refuses	196	109	60	27
Interviewee refuses for reasons of policy	5	3	2	0
Someone else refuses on behalf of interviewee	9	6	2	1
Unreliable interviewee	9	4	5	0
No. of telephone interviews	378	176	141	61
Weighted response frequency	57%	50%	62%	57%

Comment: businesses in the postal field work given the dropout code 'address unknown'; 'disabled' or 'sick' were included in the sample for telephone interviews.

Kinnmark

Company name
Att: Controller /Financial manager
Address
Postal code
Location

Help us to make it easier for businesses to keep VAT accounts and to file VAT returns

Your business is one of all the firms that together perform a very important task in Sweden. The task is to keep VAT accounts, file VAT returns and pay the VAT that is charged on most of the things that private individuals consume. VAT is one of the most important sources of public income in Sweden. It amounts to more than SEK 200 thousand million annually. This may be compared with total expenditure for the health service which amounted to 167 thousand million kronor in 2002 or with all education in comprehensive and secondary schools which in the same year cost 139 thousand million kronor.

Your work and the work of all the other businesses in handling VAT entails costs, not least due to the fact that time and resources are taken away from running your business. The Tax Board wishes to make it as simple as possible for you and all other businesses to keep records and accounts of VAT and to pay VAT. This way the cost of handling VAT can be reduced.

Kinnmark Information AB have been commissioned by the Tax Board to carry out a survey, now underway, which aims at finding ways and means of making it cheaper and simpler to keep records and accounts of VAT. Your business has been selected by random sample to participate in this survey. The questions in the questionnaire relate to such questions as how much time your business devotes to VAT records and accounts, both on the whole and in various specific areas, but also how you as a business-owner experience various aspects of handling VAT. Taking part in the survey is voluntary, but by answering the questions you will contribute to making the handling of VAT both cheaper and simpler- a contribution we are very grateful for. Please use the postage-free reply envelope when you return your answers.

You and your business will remain anonymous as all information used for identification is destroyed when the answers are registered. The bar code in the questionnaire is merely for registering that the returned form has been received, which is to prevent us from troubling you with reminders unnecessarily. In the data that is passed on to the Tax Board no one can read what you specifically answered. The survey has been designed in joint consultation with the Board of Swedish Industry and Commerce for Better Regulation (NNR).

We thank you in advance for your participation. If there is some question you would like to have answered please get in touch with us or with the two persons at the Tax Board in charge of the project: Anna Hansson and Mats Andersson.

Yours sincerely,

Kinnmark Information AB

National Tax Board

National Tax Board

Magnus Kinnmark

Mats Andersson

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e-post: magnus@kinnmark.se

Below follow a number of questions about handling VAT in your company.
The term 'handling VAT' includes the following:

1. That part of bookkeeping that relates to the accounting of deductible VAT (input tax) and VAT to pay (output tax)
2. Calculation of VAT that is due for payment or for recovery
3. Filling in the VAT section of your tax return and having it signed
4. Filling in EC sales list
5. Contacts with the Tax Board, your accountant and accounting consultant in matters relating to VAT
6. Reading VAT brochures, legislation and other information

Please note that all questions in the questionnaire refer to the latest financial year for [linked field – business name]

- | | |
|---|---|
| 1. For how many years has your business been active? | <ul style="list-style-type: none"> € less than 1 year € 1 – 3 years € more than 3 years |
| 2. How many employees does your business have? | <ul style="list-style-type: none"> € 0 € 1-4 € 5-9 € 10-49 € 50-499 € 500 or more |
| 3. Approximately how large is the sales turnover, VAT excluded, of your business? | <ul style="list-style-type: none"> € 0-999.999 kronor € 1,000,000-9,999,999 kronor € 10,000,000-39,000,000 kronor € 40 million kronor or more |
| 4. Approximately how many customer and supplier invoices did your business handle during the latest financial year? | <ul style="list-style-type: none"> € 1-200 € 201-500 € 501-1,000 € 1,001-5,000 € more than 5,000 |
| 5. How does your business submit VAT returns? | <ul style="list-style-type: none"> € Monthly with tax return € Once annually with income tax return € Once annually with tax return |
| 6. Does your business submit its VAT return to the Tax Board via the Internet? | <ul style="list-style-type: none"> € Yes € No |
| 7. Does your business have a computerised accounting system that simplifies the preparation of VAT returns? | <ul style="list-style-type: none"> € Yes € No |

8. What rate(s) of VAT is/are charged on the sales of your business? (NB several alternatives may be ticked.)

- €25 per cent
- €12 per cent
- € 6 per cent
- € 0 per cent

9. Do you handle VAT internally in your business and/or purchase this service externally?

€Handle VAT internally €Purchase the service externally €Both internally and externally



9b. Do you also purchase any of the following services externally?

	Yes	No
Day to day accounting	€	€
Year-end procedures	€	€

9c. Approximately how much did your business pay excluding VAT for all external help (handling VAT, accounts, accounts-closure procedures) during the latest financial year. Enter the approximate sum in the box below.

SEK
€No idea



Time required for internal handling of VAT

10. Approximately how many hours did you/your business devote to internal handling of VAT during the latest financial year? hours

€ We devote no internal time at all to handling VAT

€ No idea

11. If you were to divide up the time you/your business have/has devoted to the internal handling of VAT between preparatory work, preparing the tax return and finishing work-how would these hours be allocated approximately?

Preparatory work (for example acquainting yourself with current legislation and judging which rules are applicable) %

Work with the tax return (e.g. compiling supporting figures, drawing up the tax return/quarterly tax return, calculation of tax due for payment or to be reclaimed and arranging for the tax return to be signed.) %

Finishing work (e.g. documentation, inquiries from the Tax Board and corrections of previously submitted tax returns) %

+

Total %
€ No idea

Special questions about VAT

Now some questions about individual aspects of working with VAT Please answer 'yes' or 'no' to the following questions, and tell how you experience working with VAT for every question you answer with 'yes'.			How do you experience this aspect of working with VAT? Very easy to work with Very onerous												
	Yes	No	0	1	2	3	4	5	6	7	8	9	10	No idea	
12. Has your business had any sales to another EU country during the latest financial year?	€	€	€	€	€	€	€	€	€	€	€	€	€	€	€
13. Has your business made purchases from another EU country during the latest financial year?	€	€	€	€	€	€	€	€	€	€	€	€	€	€	€
14. Has your business had any sales to a country outside the EU during the latest financial year?	€	€	€	€	€	€	€	€	€	€	€	€	€	€	€
15. Has your business purchased from a country outside the EU during the latest financial year?	€	€	€	€	€	€	€	€	€	€	€	€	€	€	€
16. Does your business conduct so-called mixed business, i.e. does your business have sales that are both liable for and exempt from VAT?	€	€	€	€	€	€	€	€	€	€	€	€	€	€	€
17. Is your business taxed with more than one rate of VAT (e.g. both 25% and 12%)?	€	€	€	€	€	€	€	€	€	€	€	€	€	€	€
18. Is your business registered for voluntary tax liability for letting premises?	€	€	€	€	€	€	€	€	€	€	€	€	€	€	€

Paying invoices

19. Has it ever happened during the latest financial year that your business has had to pay VAT before you yourself received payment from the customer?

€ Yes →	19b. For how large a part of the sales of the business do you estimate that this was the case?
€ No	€ A very small part
	€ A small part
€ Don't know	€ To some extent
	€ Quite a large part
	€ A very large part
	€ Don't know
	19c. What do you believe are the cause(s) of the late payments? (you may tick more than one alternative)
	€ The customer/s could not pay due to their own liquidity problems
	€ The customer/s ignore/s our payment terms
	€ We give extended credit because customers demand it
	€ Other reason
	€ Don't know

Thank you for your assistance!

Please return the questionnaire in the attached reply envelope.

Annexe 5 Businesses Interviewed

In the course of the work on this report a number of representatives of a number of businesses, authorities and municipalities have been interviewed so that the authors might form a conception of what resources are put into handling VAT and what special problems may exist. These contacts have contributed valuable information to this study. We wish to thank the persons and firms named below for the time and personal involvement they devoted to our interviews.

Firm, authority, municipality	Contact person(s)
Coop Norden AB	Ulla Andersson och Gunnar Askåker
Electrolux	Johan Hörberg, Staffan Lindberg och Ingemar Uussaar
Ericsson Shared Services AB	Kerstin Hanell
Fazer Amica	Bibbi Carlsson och Lena Nordgren
Hennes & Mauritz	Lisbeth Lövblom
Hogia AB	Axel Carlsson
Järfälla Kommun	Britt-Marie Constantinides och Elisabeth Holmström
My Travel	Karin Englund
Norstedts juridik	Gunilla Krogh
Skanska	Marie-Louise Sörlin mfl
Skatteverkets ekonomiavdelning	Berit Calais och Per Karlsson
Telia Sonera	Anders Nihlen

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